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WOMEN IN THE LABOR FORCE

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Preface

Society's attitudes about a woman's status as a worker were further outdated by the pronounced economic and demographic changes of the last decade. The standards employed to rationalize a woman's position in the labor force in 1970 were inappropriate then and even more so today -- yet they persist.

This report is constructed on the premise that women have always worked to earn a living. Men work to earn a living too. The difference is that our society develops a man's attitude about his status as a worker so he assumes the freedom to choose from a broad range of employment opportunities. The assumption society erroneously leads women to is that they will be wives and mothers, they work to supplement incomes and, therefore, have a casual attachment to the labor force. Society has not connected motherhood, family responsibility and work for women in a way equal to the systematic connection between fatherhood, family responsibility, and work that it has made for men.

Women today are "proving" their need to work is real. Their participation in the labor force especially in recent years bears witness to it. However, in a manner of speaking, "push has come to shove." Women in larger numbers are doing the work they have always done and are earning the same proportionately low incomes they have always earned. As a result, our inflated economy and the reduced standard of living it has imposed on all of us has had an even more severe impact on people with low incomes -- a majority of which are women.

This report concludes that the labor force status of women as witnessed in the last decade will grow into a major social issue. To reach that conclusion, the report examines the impact of earnings on women's standard of living; how the earnings in their jobs are not influenced by education and work experience in the same way that men's are; their labor force participation and economic need; the occupations and industries in which they earn their living and how well that employment satisfies their economic requirements; and where women find employment and where they are not finding it.

As a beginning, the following table presents a good overview of the population and labor force changes that have occurred in our society during the 1970's.

Table 1
WISCONSIN WOMEN: POPULATION, LABOR FORCE, EMPLOYMENT GROWTH
BY AGE FOR THE 1970's

	Population	Labor Force	Employment
16-24			
1970	345,000	178,000	166,000
% Change	30.0	83.1	75.0
1979	448,000	326,000	292,000
25-44			
1970	489,000	232,000	222,000
% Change	30.6	77.9	70.3
1979	639,000	411,000	378,000
45-64			
1970	451,000	226,000	218,000
% Change	3.6	9.3	2.8
1979	462,000	246,000	224,000
Total 16-64			
1970	1,285,000	630,000	606,000
% Change	20.5	56.0	47.5
1979	1,549,000	983,000	894,000

Source: Current Population Survey, unpublished, U.S. Bureau of Labor Statistics. Available from the Wisconsin Department of Industry, Labor and Human Relations, Labor Market Information Section.

General Population

The table below charts the composition of Wisconsin's female population by age group and selected years.

Table 2
Female and Total Population for Selected Years by Age
(Thousands)

	1970	1976	1979	1980*	1985*	1990*
0-4	186.9	157.0	158.5	163.7	190.7	202.2
5-17	588.2	547.5	505.7	492.2	451.5	470.7
18-20	125.4	145.0	150.7	150.7	126.7	160.5
21-44	631.7	733.7	808.7	837.7	962.2	1029.5
45-64	453.0	468.0	466.7	465.5	462.0	477.5
65+	265.2	300.2	324.2	331.2	364.0	391.0
Total Women	2250.4	2351.5	2414.7	2441.2	2557.2	2677.5
Total Pop.	4417.8	4604.7	4698.0	4737.0	4949.0	5175.0

*Projected Figures

Source: Wisconsin Population by Age and Sex, Demographic Services Center, Wisconsin Department of Administration, August 1979.

Note the decline in the number of females (as well as males) 18-20 years old that is anticipated by 1985. This phenomenon is due to the passing of the large numbers of baby boom children into higher age brackets. The growth in the 0-4 and 5-17 age groups is the result of more women in career age brackets who are raising children. Even though fertility rates and average family size are down, the fact that there are so many more women of child bearing age is causing these figures to increase somewhat.

The table on the following page describes the composition of the female segment of the population by age and race. These are estimates for 1980 from Berkeley Laboratories, California. The majority of women in the "other" category would be Hispanic. The small remainder would be Pacific Islander, Vietnamese, Cambodian and so forth.

Table 3
Population Composition for Races
of Women by Age

(1979)

Age	White	Black	Other
15-19	227,037	12,781	2,544
20-24	214,304	15,320	3,263
25-29	167,896	14,770	2,915
30-34	147,522	10,842	2,179
35-39	134,797	6,872	1,400
40-44	117,849	5,715	1,329
45-49	113,267	4,610	1,155
50-64	353,597	9,867	2,042
Total	1,476,269	80,777	16,827

Household Relationships*

The following table charts women living in Wisconsin in 1978 according to their marital status.

Table 4
Distribution of Female Population in Households**
By Age and Marital Status, March 1978

(Figures in parentheses are percentages of row totals)

Age Group	Married	Widowed	Divorced	Separated	Never Married	Total
18-44	576,189 (62.9)	5,300 (0.5)	75,705 (8.3)	20,726 (2.3)	237,687 (26.0)	915,607 (100.0)
45-64	367,331 (81.0)	50,716 (11.2)	21,509 (4.7)	7,236 (1.6)	6,754 (1.5)	453,546 (100.0)
65+	116,495 (40.8)	140,032 (49.1)	14,043 (4.9)	1,305 (0.5)	13,487 (4.7)	285,362 (100.0)
Total	1,060,015 (64.1)	196,048 (11.8)	111,257 (6.7)	29,267 (1.8)	257,928 (15.6)	1,654,515 (100.0)

Source: Wisconsin Population and Households: March 1978, Demographic Services Center, Wisconsin Department of Administration, January 1980.

*See Appendix B for definitions of households and families.
**Includes non-institutional group quarters.

About 182,000 women in the state between the ages of 18 and 64 were estimated to be living without a spouse because of death, divorce or separation from their spouse -- about 16 percent of the women of working age. These women undoubtedly make up a large percentage of the 238,000 women estimated to be heading households.

That proportion is likely to be growing. Trends indicate that the number of women forced to head households due to separation and divorce is on the rise. In addition, the number of people postponing marriage and/or choosing to never marry is growing so that the total number of single women is apt to continue to grow. The number of women of working age that never married was estimated at over 240,000 in 1978.

One out of every four Wisconsin households is headed by a woman. However, women living alone constitute more than 50 percent of the female headed households. Sixty percent of all women living alone in 1978 were 65 and over.

The number of one person households increased by more than 100,000 between 1970 and 1978. Two-thirds of all persons living alone in 1978 were female. Forty percent of all persons living alone in 1978 were women 65 and over.

Family Relationships[1]

National data provided by the Bureau of Labor Statistics of the U.S. Department of Labor offers additional information on women relative to the family unit. The number of families with one spouse present maintained by women averaged about 5.4 million in 1979 as opposed to about 1.5 million maintained by men.

The latest family data available for Wisconsin is from the 1976 Survey of Income and Education (SIE Survey). At that time, it was estimated that there were 115,000 families headed by women and 32,000 families maintained by men with no spouse present. The ratio of female to male family heads from the 1976 SIE Survey for Wisconsin and that reported in the more current national (Current Population Survey) data is virtually the same at 3.6 to 1, i.e., the Wisconsin ratio follows national trends.

The next table shows the type of family and the number of children per family type by selected age groups.

[1] See Appendix B for definition of family.

Table 5
Distribution of Families, By Type of Family
and Presence and Age of Own Children, March 1978

(Figures in parentheses refer to the number of children per family in each category)

Presence and Age of Children	Type of Family: Husband-Wife	Other Male Head	Female Head	Total
No Children Under 18	496,117 (0.29)	16,374 (0.29)	44,068 (0.88)	556,559 (0.34)
All Children Under 6	121,600 (1.45)	0 (0.00)	17,118 (1.23)	138,718 (1.42)
Some Under 6, Some 6 to 17	90,617 (3.32)	0 (0.00)	27,392 (3.01)	118,009 (3.25)
All Children 6 to 17	334,841 (2.91)	8,222 (2.20)	69,738 (2.44)	412,801 (2.81)
TOTAL	1,043,175 (1.53)	24,596 (0.93)	158,316 (1.97)	1,226,087 (1.57)

Source: Wisconsin Population and Households: March 1978, Demographic Services Center, Wisconsin Department of Administration, January 1980.

The table indicates that, in 1978, 17 percent of all families in Wisconsin with children 17 or less were headed by women. Calculating the distribution of families headed by women according to the age of the children yields the following:

Table 6
Percent of Families Headed by Women
By Age of Children

All Under 6	Some Under 6 and Some 6-17	All 6-17
11%	17%	17%

The number of dependent children in families headed by women according to the children's age can be estimated from the above table by multiplying the number of children per family by the number of families:

Table 7
Number of Children in Families
Headed by Women by Age of Children

All Under 6	Some Under 6 and Some 6-17	All 6-17	Total
21,055	82,450	170,160	273,665

According to these estimates, on the average more than 273,000 children under age 17 resided in families headed by women -- 32 percent of all children age 17 and under in 1978.

Households and Poverty

The number of Wisconsinites estimated to be living below the poverty level in 1978 was just over 348,000. The table below provides additional household data concerning the distribution of the household population below the 1977 poverty threshold.

Table 8
Distribution of Household Population, Below Poverty Level by Age and Sex, March 1978

(Figures in parentheses are percentages of row totals)

Age/Sex	Below Poverty		Total
Male Under 65	121,507	(5.9)	2,068,158
Female Under 65	191,450	(8.9)	2,144,162
Both Sexes Under 65	312,957	(7.4)	4,212,320
Male 65+	8,808	(4.2)	207,432
Female 65+	26,857	(9.4)	285,359
Both Sexes 65+	35,665	(7.2)	492,791
Total Male	130,315	(5.7)	2,275,590
Total Female	218,307	(9.0)	2,429,521
Total Both Sexes	348,622	(7.4)	4,705,111

Source: Wisconsin Population and Households: March 1978, Demographic Services Center, Wisconsin Department of Administration, January 1980.

Note that in every age category the number of women living in poverty significantly outnumbers men. Overall there are 1.67 times more women living in poverty households than men. The most substantial difference is for persons over 65 where three times as many women have incomes below poverty level. The elderly, particularly women, are especially hard hit by poverty.

The table on the following page shows the distribution of households by age/sex and poverty level of household head.

Table 9
Distribution of Households by Poverty Level and Age/Sex of Household Head, March 1978

(Figures in parentheses refer to households within each age/sex category of the Household Head)

	Male Head		Female Head	
Age of Head	Below Poverty	Above Poverty	Below Poverty	Above Poverty
18-44	27,640 (4.6)	568,223 (95.4)	41,092 (26.3)	115,147 (73.7)
45-64	20,397 (4.9)	392,548 (95.1)	12,379 (15.0)	69,905 (85.0)
65+	7,358 (3.7)	194,187 (96.3)	22,988 (15.0)	130,628 (85.0)
Total	55,395 (4.6)	1,154,958 (95.4)	76,459 (19.5)	315,680 (80.5)

Source: Wisconsin Population and Households: March 1978, Demographic Services Center, Wisconsin Department of Administration, January 1980.

There is a greater tendency for female headed households to have incomes below the poverty level than those headed by men. The rate of poverty-stricken households headed by women was nearly four times that headed by men (about 20 percent to five percent). One in five households headed by a woman in 1978 was estimated to be in poverty. While female headed households comprise about a quarter of all households, they make up nearly 60 percent of all households estimated to be in poverty.

Families and Poverty

Data for Wisconsin from the 1976 SIE Survey show that 5.8 percent of all family heads and 6.4 percent of all persons living in families subsisted below the poverty level. By comparison, nearly one in three persons (30 percent) living in families headed by a woman was estimated to be living in poverty in 1976. Twenty-six percent, one in four women family heads, earned a poverty level income according to SIE Survey estimates -- about 30,000 families. Applying the 26 percent SIE estimate for 1975 to the Department of Administration estimate of the total number of families headed by women in 1978 (over 158,000), indicates that over 41,000 female headed families live in poverty.

The impact of this is significant. Recalling previous 1978 estimates that 32 percent or 273,000 children live in families maintained by women, it is possible to approximate the number of children living below the poverty level in these types of families. Using an average of about 2.3 children under 17 for all families times about 41,000 families in poverty yields 97,000+ children growing up in poverty in 1978 in families headed by women.

While these figures are approximations derived from estimates, they are probably conservative for two reasons. Since a family by definition includes people other than children (i.e., grandparents, brothers and sisters of the family head) by discussing just children we are undercounting. Also, as described in the Appendix A outlining poverty income determinations, poverty is a combined consideration of family size and income. Therefore, it is likely that the average number of children per poverty level family is higher than 2.3.

A glance at earnings data for heads of families by sex quickly shows why families maintained by women have such a high likelihood of being in poverty.

Table 10
Median Weekly Earnings of Families

	SIE Data for Wisconsin 1975	Ratio	CPS Data for the U.S. 1979	Ratio
Women Heads	$138	$1.00	$190	$1.00
		to		to
Men Heads	$231	$1.67	$310	$1.63

For every dollar a woman earns to maintain the family she supports, a man in similar circumstances earns over $1.60. The ratios for 1975 Wisconsin data and 1979 CPS national data are very consistent.

Wife and Husband Families

According to the Survey of Income and Education there were about 1,035,000 husband-wife families in Wisconsin in 1975. In just under half of those families the wife was in the paid labor force. In 1979, according to national CPS data, almost 60 percent of all married couple families had two wage earners. A working wife is becoming increasingly important to the standard of living for her family.

More than 85 percent of the families where the wife worked had combined earnings over $12,000 a year. On the other hand, 60 percent of the families in which the wife was not working earned more than $12,000. The median income when both husband and wife are working was $17,793 while the median income for just the husband was $13,807. In 1975, the median for the amount of additional income contributed by a working wife was just $3,372, about $65 a week. Ninety-five percent of all working wives were estimated to be earning less than $12,000 in 1975.

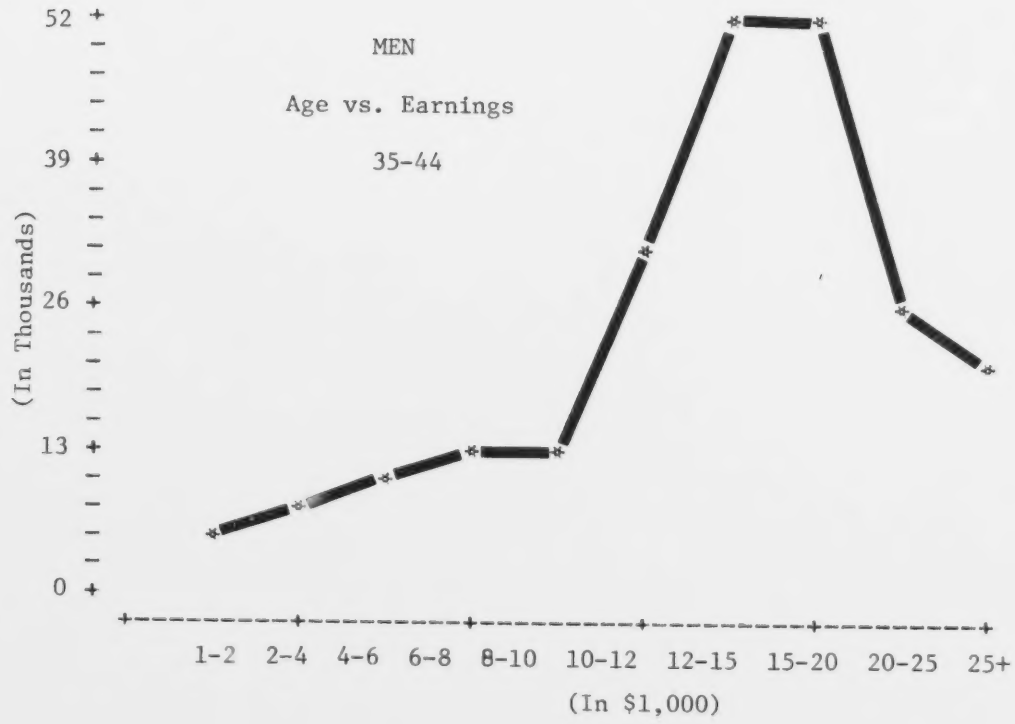
National data for 1979 show the same relationship. Approximately 85 percent of all working wives earned less than $17,800 ($12,000 in 1975 adjusted for inflation). Their median earnings were $189. Adjusted downward for inflation, that would equal about $127 in 1975 or $6,600 a year. The increase from 1975 is about 96 percent ($3,372 to $6,600). It is likely that more of the gain in constant dollars is due to an increase in hours worked than in higher pay as will be shown later.

Working wives are clearly contributing more to family earnings today than they did in 1975. Ingrained in our society is the foregone conclusion that a working wife "supplements" a family's income. However, it is clear that income needed to support a family is hardly supplemental in nature regardless of its proportion. Women have always shared the responsibility of providing income for their families. There are more married women sharing that responsibility today than ever before. There will be even more by 1990.

Age, Education and Earnings Relationships

Under normal conditions, one could expect that the longer a person works the higher his/her earnings will be. Further, even before analyzing the situation, it can be expected that the earnings of various age groups would increase as the age of the cohort increases -- age being a proxy for work experience.

This picture is quite true for the male labor force but is altered when viewing it relative to female earnings. The graph below illustrates the earnings progression for a selected age cohort of men in Wisconsin in 1975.*



*For additional graphs see Appendix C.

Clearly, the progression fits what is expected to be the case. A large group of men show up in the higher earnings brackets in the peak earnings years 35-44 and after.

Earnings for a selected age cohort of women are illustrated on the following graph.*

The expected growth in earnings does not develop. There is slight movement into the higher earnings brackets in the 25-34* age group, but in the peak earnings years the progression men experience does not occur. The various age cohorts for women clearly group below $8,000 per year. Seventy-six percent of women in their peak earnings years (35-44) earned less than $8,000 in 1975 whereas 85 percent of the men in this same age cohort earned at least that much or more!

From the previous comparison of earnings between the 1975 SIE data and the 1979 CPS data and assuming that there hasn't been a marked change in these statistics for 1979, after adjusting for inflation, $11,900 today is equivalent to $8,000 in 1975. It is anticipated that about the same percentage of women (76 percent) earn less than $11,900 and that about 85 percent of men earn more.

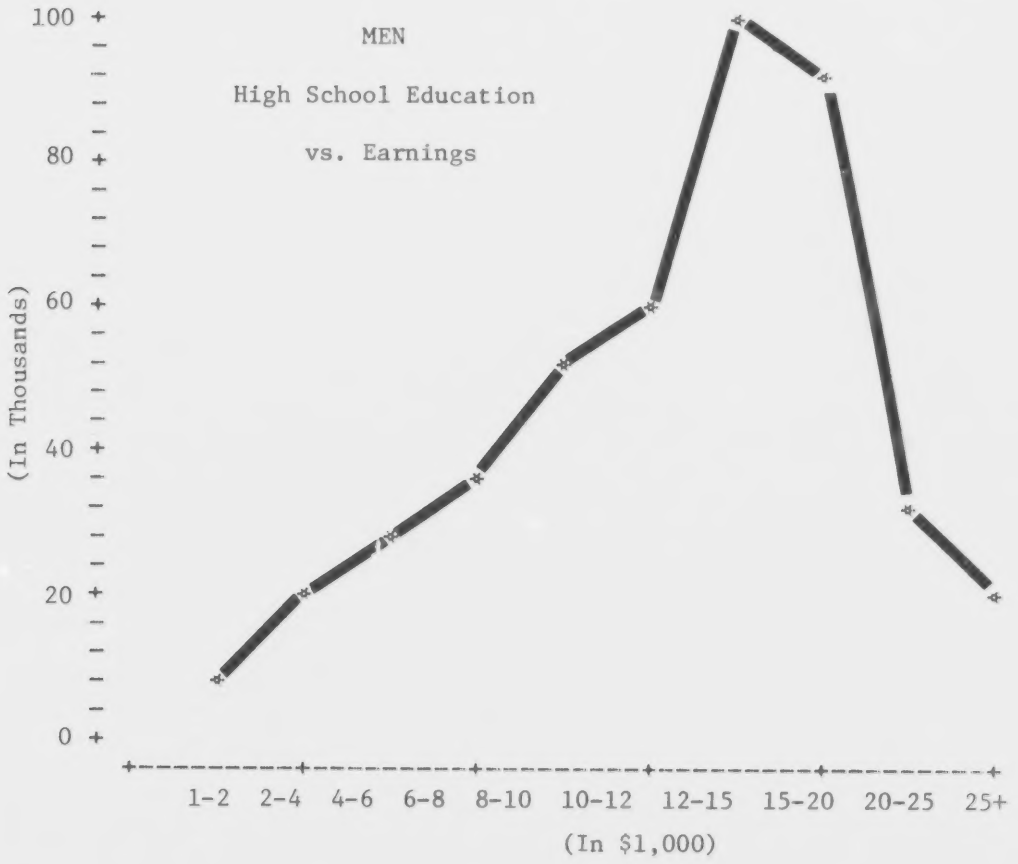
*For additional graphs see Appendix C.

Education and Earnings

A comparison of education and earnings provides a means of looking at the dispersion of people through the earnings categories according to their level of education.

The amount of earnings is related to education in general. However, a higher level of formal education makes a higher income more probable. The fact that an education means higher earnings over a lifetime is also well known. This is probable because a person is apt to have a better job in terms of higher pay and job stability, i.e., a higher number of hours worked in a year. The data used for Wisconsin are from the 1976 Survey of Income and Education and are for total earnings which means that both the amount earned per hour and the number of hours worked determine total earnings.

The graph below charts male earnings and level of education.[1]



[1] Some caution must be used when comparing men and women using total earnings relative to education achieved because a large number of women (twice as many as men) worked at part-time jobs. How greatly this affects the earnings data is not known.

In general, the increase in the number of men in higher earnings categories as the level of education increases is about what is expected. The table below shows the percentage of men by their level of education earning above selected wage levels in Wisconsin. The data is for 1975.

Table 11
Ratio of Men Earning Above Selected Earnings Levels by Level of Education, 1975

	Over $8,000	Over $10,000	Over $12,000	Over $15,000
Elementary (8 years)	40%	35%	23%	12%
High School (4 years)	79%	67%	54%	32%
College (4 years)	84%	76%	65%	46.5%

Source: 1976 Survey of Income and Education, Table 8B. For persons 25 years and older.

From SIE Table 8B, about 70 percent of all men 25 years and older earned more than $8,000 in 1975. As the table above shows, 40 percent of all males with an eighth grade education earned more than $8,000. The number of men earning more than $15,000 with an eighth grade education is about a quarter of those earning more than $8,000. Education makes a difference in the distribution of earnings as can be seen in the percentages of high school and college men earning above $8,000. A high school graduate's ability to earn at higher levels is somewhat better -- 45 percent of those earning above $8,000 earned $15,000 or more. College graduates, in turn, have 54 percent earning above $15,000. These figures clearly demonstrate that more education offers men a greater opportunity to earn a better living. They also reveal that less education for men, while apparently still a barrier to higher earnings, is much less than one might think. The distribution of men in earnings categories above $8,000 for high school graduates generally parallels that for college graduates. (See Table 11.)

Graduating from high school and college also makes a significant difference to total earnings as opposed to not graduating as Table 12 illustrates.

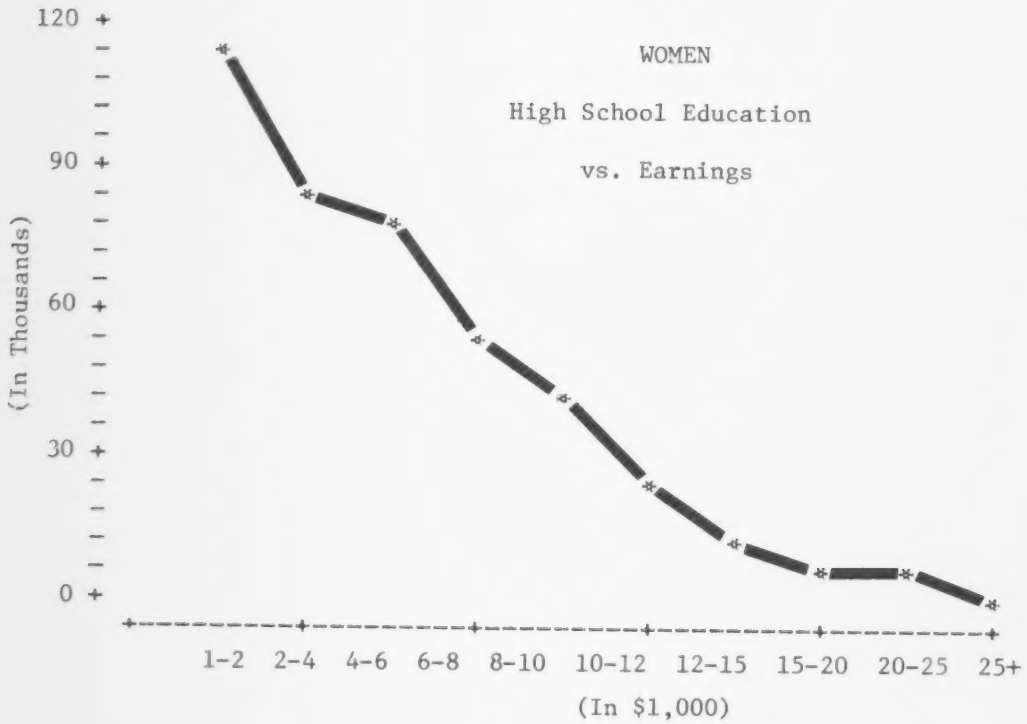
Table 12
Male graduates as a percent of all males attending high school or college within selected earnings categories, 1975

	$4,000-5,000	$10,000-12,000	$15,000-20,000
High School Graduates	57%	72%	85%
College Graduates	41%	60.5%	65%

Source: 1976 Survey of Income and Education, Table 8B. For persons 25 years and older.

Eighty-five percent of all men earning $15,000-20,000 per year completing some high school were high school graduates, whereas 65 percent of those completing some college in this earnings category were college graduates.

Women have a significantly different experience. As the graph below clearly illustrates, women, in general, experience far less gain in earnings relative to their level of education.



Additional comparisons can be found in Appendix C.

The table on the following page shows the percentage of women by their level of education earning above selected wage levels in Wisconsin.

Table 13
Ratio of Women Earning Above Selected Earnings Levels
by Level of Education, 1975

	Over $8,000	Over $10,000	Over $12,000	Over $15,000
Elementary (8 years)	6%	2.6%	0.6%	0.6%
High School (4 years)	21%	11%	3.4%	1%
College (4 years)	47%	37%	23.5%	11%

Source: 1976 Survey of Income and Education, Table 8B. For persons 25 years and older.

From SIE Table 8B, only 21 percent of all women earned more than $8,000 in 1975 as opposed to about 70 percent of men. From Table 13 above, only six percent of women with no more than a grade school education earned above $8,000 compared with 40 percent for men. Less than one percent (0.6) of women with a grade school diploma earned above $15,000. That is about 10 percent of the total number of women above $8,000 and is a very small number.

Women with a high school diploma, as in the case with men, fare somewhat better. While the percentage increase (six percent to 21 percent) is significant, the number earning above $8,000 is still quite low. The percentage of women earning above $15,000 with a high school diploma is about 10 percent of those earning above $8,000 -- unchanged from the previous comparison. That comparison for men with high school diplomas was 45 percent -- a gain of 20 percentage points over men with only a grade school education.

At the college level, education begins to make a difference in earning power. Forty-seven percent of women college graduates earned above $8,000. Twenty-three percent of women with college degrees earning over $8,000 earned above $15,000. A college education clearly improves the distribution of women across the various wage categories. However, 84 percent of men with the same level of education earned above $8,000 and nearly 47 percent of those earned above $15,000 — almost half.

Realize though, that, while 47 percent of women with college degrees earned above $8,000, 53 percent of college graduate women 25 years and older earned less than $8,000!

Table 14
Female graduates as a percent of all females attending high school or college within selected earnings categories, 1975

	$4,000-5,000	$10,000-12,000	$15,000-20,000
High School Graduates	76.5%	88.5%	90%
College Graduates	39%	72%	92%

Source: 1976 Survey of Income and Education, Table 8B. For persons 25 years and older.

The table on the preceding page is the same as Table 12 for men on Page 11 of this report. It clearly shows that finishing high school and college as opposed to not completing them is much more important to the total earnings of a woman than it is to those of a man. To illustrate: Seventy-two percent of the men earning between $10,000 and $12,000 had high school degrees whereas nearly 90 percent of women did. The same comparison at the college level shows that about 61 percent of of men earning $10,000-12,000 had degrees while 72 percent of all women had degrees. At the $15,000-20,000 level, 85 percent of males versus 90 percent of females had high school degrees and 65 percent of men and 92 percent of women had college degrees!*

Education is more important to a woman's earning potential because the higher paying occupations they concentrate in require it. Some examples are nurses, dietitians and teachers. These occupations, while not high paying in general, pay above average wages to women -- hence earnings and completing an education are more highly correlated than for men.

It will be useful to remember this section for later reference when reading the section on the occupational distribution of women and earnings because it helps to demonstrate the inequitable access to higher paying employment that exists.

A major issue currently and for the future is the inequitable value placed on work which is traditionally female. Why, for example, shouldn't a registered nurse earn a salary comparable to a bus driver? The discrepancy, as will be shown, is widespread.

Ethnicity and Earnings

National and state data for women by race are not available for families and households. The available data relates to sex, race and earnings. The following table shows the percent distribution for Black and Hispanic women by selected earning levels for the nation from the BLS Current Population Survey data for 1979.

Table 15
Percent Distribution of
Black and Hispanic Women By Earnings

U.S. 1979

	Under $150	Under $200	Over $200
Black	37.0	62.0	38.0
Hispanic	46.0	72.0	28.0

By comparison, about 20 percent of Black men earn less than $150, about 40 percent earn less than $200 and about 40 percent are over $200. Hispanic men are distributed approximately the same as Black males.

*See the multiple graphs by levels of education for male and female, Appendix C.

The next table illustrates earnings for Black and Hispanic women in Wisconsin in 1975 from the Survey of Income and Education. The earnings scale has been adjusted for inflation. In real dollars, $100 in the table below in 1975 is equivalent to $150 in 1979 from the table on the preceding page.

Table 16
Percent Distribution of
Black and Hispanic Women By Earnings

Wisconsin 1975

	Under $100	$115-$155	Over $155
Black	64.0	80.0	20.0
Hispanic	75.0	88.0	12.0

While 80 percent of Black women earned below $155 a week in 1975, 46 percent of Black men earned less than that. At the higher earnings level, 54 percent of Black men earned more than $155 opposed to just 20 percent for Black women.

The data for Hispanic males shows that 37 percent as compared with 88 percent of Hispanic women earned less than $155, while 63 percent of the men compared with just 12 percent of the women earned above $155. Earnings of $155 a week is equivalent to $8,000 a year before taxes.

The gap between the wage distribution of minority women and that of minority men is less than for White men and women. However, the difference in wages earned between minorities and non-minorities is significant. Minority women earn very low wages. There is a much higher proportion of minority women in the lowest wage brackets compared with non-minority women. Hispanic women on the whole receive the lowest compensation of all three groups for their labor.

Labor Force Participation

Women continue to participate in the labor force in increasing numbers. This trend is well documented. This section will not belabor the point but rather will highlight the trend historically, briefly examine some national and state data and offer some brief explanations as to why more and more women are choosing to seek employment.

The labor force in general consists of all those employed plus all those unemployed and looking for another job (or waiting to go back to their former job). Two additional classifications -- entrants and re-entrants -- refer to those that are looking for work but have never worked before and those who have held jobs from time to time. A student who held a part-time job while in school and looked for a full-time job upon graduation is a re-entrant as is a housewife who dropped out of the labor force to raise children and is looking for a job again.

The table below charts the growing proportion of women in the total labor force.

Table 17
Women in the Labor Force
Selected Years, U.S.
(In Thousands)

Year	Women In Labor Force	Women in Labor Force as a percent of: Total Labor Force	Women in Labor Force as a percent of: All Women of Working Age
1900	4,999	18.1	20.0
1945	19,304	29.2	35.8
1950	18,412	28.8	33.9
1960	23,272	32.3	37.8
1970	31,560	36.7	43.4
1979	43,094	41.2	50.8

Source: Women in the Labor Force: New Data Series, Bureau of Labor Statistics, Janet Norwood and Elizabeth Woldman.

Looking at national data beginning with the year 1900, women were estimated to be 18.1 percent of the total labor force -- about 20 percent of all women of working age were in the labor force at that time. Near the close of World War II, the labor force consisted of about 30 percent women and 36 percent of all women of working age. There was a slight decline in labor force participation reported in 1950 to about 29 and 34 percent respectively, but since that time the growth of female labor force participation has been steady, reaching 51 percent of all women of working age and 41 percent of the total labor force by 1979.

Most of the record gain in women's labor force participation in the 1970's occurred among women under 35 years of age. The greatest increase is for women 25-34 years of age -- up a remarkable 17 points to 62 percent by 1978. Over 70 percent of the women in this age group are married and have children at home.

Recent estimates done for Wisconsin by the Berkeley Laboratories in California project labor force participation of women based upon Current Population Survey data for the state for 1981. The data clearly shows the dramatic increase in the number of women deciding to seek work.

Table 18
Labor Force Participation Rates (LFPR)
Women for Selected Years By Race, Age
Projected for 1981, Wisconsin

	1970	1975	1981
White Females			
16-17	30.7	55.6	73.1
18-19	56.2	69.2	81.5
20-24	59.8	72.2	82.3
25-34	43.5	INA	75.0
35-44	50.4	INA	73.5
45-64	49.7	51.3	55.9
65+	10.6	8.1	9.5
Black Females			
16-17	19.4	INA	54.6
18-19	37.4	INA	59.3
20-24	56.7	INA	77.0
25-34	61.6	INA	84.2
35-44	62.0	INA	81.2
45-64	56.0	INA	63.4
65+	14.6	INA	13.4

The information for 1975 is from original CPA series for Wisconsin and uses different age brackets (20-24 and 25-44) so there is no representation of the 25-34 age group.

Notice that the change in labor force participation rates between the age groups of White women vary somewhat from those of Black women. The highest rate for White women occurs in the 20-24 age bracket and declines from there. Family formation in the earlier ages and retirement from the labor force in later years accounts for the decline.

For Black women, however, the order is reversed. The highest participation rate occurs in the 25-34 age bracket and remains higher in the older age bracket. A larger number of Black women than White women start work later and work longer. Because of the lower earnings for all minorities, it stands to reason that a Black woman's economic reasons for staying in the labor force are stronger than a White woman's.

Another factor influencing the rising labor force participation among women is that during this period, the U.S. has experienced the highest divorce rates on record. The proportion of all women that are divorced reached an estimated 10 percent in early 1979 while the proportion of single women of working age climbed to 25 percent of the female population. Because these women usually have high labor force participation, their growing numbers have also contributed to the rising labor force participation rates of women.

The following table is both a summarization of this section and a prelude to the following sections on employment and unemployment. A casual examination of the numbers reveals the impact that female labor force participation is having on total employment.

Table 19
Employment Status, Wisconsin Labor Force, 16 Years Old and Over*

	Civilian Labor Force	% of Civilian Labor Force	Total Employed	% of Total Employed	Participation Rates
Total					
1950	1,365,695	--	1,324,830	--	--
1960	1,507,413	--	1,449,196	--	55.9
1970	1,774,008	--	1,703,629	--	61.8
1975	2,128,000	--	1,980,000	--	65.2
1976	2,175,000	--	2,053,000	--	65.8
1977	2,217,000	--	2,107,000	--	65.7
1978	2,305,000	--	2,187,000	--	67.2
1979	2,381,000	--	2,273,000	--	68.2
1981	2,502,000	--	2,332,000	--	70.2
Male					
1950	998,430	73.0	967,185	73.0	80.5
1960	1,036,790	69.0	997,150	69.0	78.4
1970	1,108,584	62.0	1,069,205	63.0	79.7
1975	1,287,000	60.5	1,210,000	61.0	80.3
1976	1,306,000	60.0	1,236,000	60.2	81.3
1977	1,313,000	59.2	1,254,100	59.5	80.1
1978	1,338,000	58.4	1,281,000	58.6	81.2
1979	1,375,000	57.7	1,318,000	57.9	81.8
1981	1,411,000	56.0	1,324,000	58.0	82.4
Female					
1950	367,265	27.0	357,645	27.0	28.9
1960	470,623	31.0	452,046	31.0	34.1
1970	665,424	38.0	634,424	37.0	45.4
1975	840,000	39.5	771,000	39.0	50.5
1976	869,000	40.0	817,000	39.8	51.1
1977	903,000	40.8	853,000	40.5	52.0
1978	967,000	41.6	906,000	41.4	54.3
1979	1,006,000	42.3	955,000	42.1	55.5
1981	1,100,000	44.0	1,008,000	42.0	59.1

Source:

1950 Census of Population, Wisconsin, Table 66.
1960 Census of Population, Wisconsin, Table 115.
1970 Census of Population, Wisconsin, Table 164.
1975 data - Geographic Profile of Employment and Unemployment, 1975. U.S. Bureau of Labor Statistics, Report 481, 1977.
1976-79 data - Current Population Survey, U.S. Bureau of Labor Statistics.
1981 Berkeley Laboratories, CPS Data Projected.

*For Graphic Comparisons See Appendix C.

Unemployment

Women, for a variety of reasons, are prone to higher levels of unemployment than are men. One reason is that the work place is not yet accommodating the needs of working women. Job opportunities in the work fields where they are still the majority do not pay well, causing high turnover which contributes to unemployment and susceptibility to layoff.

As a result, women are very vulnerable to the last in, first out philosophy associated with the seniority system approach to job security. Then, too, the industries in which they work are often more labor intensive, thereby increasing the likelihood that as those industries are affected by economic conditions, large numbers of women become unemployed at one time. Those industries are also prone to more layoffs. On many higher productivity industries where men are the majority, when output needs to be reduced machine speeds are reduced and then, if necessary, layoffs may occur. In the more labor intensive industries where women are the majority, to reduce production the work force is reduced.

The annual average number of unemployed women and the resultant unemployment rate for the U.S. and Wisconsin for the 1970's are charted in the table below.

Table 20
Female Unemployment and Unemployment Rates,
Annual Averages for the U.S. and Wisconsin,
1970-1979
(In Thousands)

	U.S.			Wisconsin	
	Number	Rate		Number	Rate
1970	1,853	5.9	1970	31	4.7
1971	2,217	6.9	1971	INA	INA
1972	2,207	6.6	1972	INA	INA
1973	2,064	6.0	1973	INA	INA
1974	2,408	6.7	1974	45	5.6
1975	3,445	9.3	1975	70	8.3
1976	3,320	8.6	1976	52	6.0
1977	3,267	8.2	1977	50	5.5
1978	2,996	7.2	1978	61	6.3
1979	2,945	6.8	1979	51	5.1

Prior to and including the 1974-75 recessionary period, the unemployment rate for women in Wisconsin was running about one percentage point or so below the nation. Wisconsin recovered more quickly from the recession than the nation as a whole, hence the unemployment rate for women here made a significant recovery while the female unemployment rate for the nation showed only gradual improvement. By the end of the decade the average Wisconsin rate was 1.7 percentage points better than the U.S. average.

For comparison, the national unemployment rate for men at the beginning of the decade was 4.4 percent, rose to 7.9 percent in 1975 and recovered to 5.1 percent in 1979. In Wisconsin, it averaged 4.0 in 1970 to 6.9 in 1975 and 4.5 in 1979. The U.S. rate for women hovers around 1.5 percentage points above the male rate while in Wisconsin the gap varied from roughly five-tenths of a percentage point in 1970 and 1979 to 1.4 percentage points during the recession year, 1975.

In the Berkeley Laboratory projections for 1981 for unemployment of men and women, one can see the assumed effects of the current recession because they are higher than the 1979 figures.

Table 21
Projected Unemployment Rates For
Wisconsin for 1981 By Race, Sex, Age

	Male		Female	
Age Group	White	Non-White	White	Non-White
16-17	15.6	43.0	19.2	28.2
18-19	10.4	29.1	11.4	29.1
20-24	8.2	26.5	8.9	22.7
25-34	4.7	16.1	6.6	18.0
35-44	3.4	10.0	5.4	10.4
45-64	3.6	14.5	5.1	11.6
65+	6.6	10.9	6.7	16.7
	Total All Male = 5.6		Total All Female = 7.6	

It is conceivable that nine percent could be the annual average unemployment rate for women in 1980. The total unemployment rate in Wisconsin through May, 1980 averaged 6.2 percent. Unemployment rates for the various cohorts are not available at the state level until after the year is out. However, based upon our experience with the 1974-75 recession, a simple comparison can give an idea of what could result. The recession in 1975 caused an average unemployment rate in Wisconsin of 6.9 percent. Since we are currently averaging 6.2 percent and because the trough of the recession is not expected to be reached until late this year, an annual average total unemployment rate close to that experienced in 1975 is likely for 1980. The average rate for women in 1975 was 8.3 percent. The rate for women this year is likely to run higher than that, the reason being that there are simply more women in the labor force today than in 1975.

Employment

The influx of women into the labor force is a major factor in the record numbers of employed people we have today. The total number of employed in the nation was consistently two million more on a month-to-month basis in 1979 than in 1978. In some peak employment months the difference was almost three-and-one-half million workers.

According to U.S. Department of Labor estimates there were 15 percent more men working in 1979 than in 1970. The growth in the number of women employed in the 1970's was phenomenal -- 38 percent more women were working in 1979 than 10 years previously. Virtually 60 percent of the total increase in the employed labor force was due to female employment growth. The table below charts national trends for the 1970's.

Table 22
Annual Average
Male/Female Employment For
The U.S. 1970-79
(In Millions)

	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979
Men	48.9	49.2	50.6	51.9	52.5	51.2	52.4	53.8	55.5	56.5
Women	29.6	29.9	31.1	32.4	33.4	33.5	35.1	36.7	38.9	40.4

As of December 1979, there were 41.7 million women employed in the nation. Of those, 36.4 million are white and 5.3 million are minorities.

The following table highlights additional national comparisons for December 1970 and December 1979.

Source: Employment and Earnings, January 1980, U.S. Department of Labor.

Table 23
Female Employment by Race, Age
For the U.S. 1970 and 1979

(In Thousands)

	December 1970	Percent Increase	December 1979
White			
16-19	2,437	41	3,435
20-24	4,104	37	5,626
25-34	4,680	200	9,373
35-44	4,961	41	7,001
45-54	5,689	4	5,930
55-64	3,711	9	4,050
65+	969	2.5	994
Total	26,551	37	36,410
Black & Other			
16-19	209	60	334
20-24	543	40	762
25-34	851	87	1,595
35-44	795	44	1,148
45-54	731	18	862
55-64	395	21	479
65+	100	34	134
Total	3,624	47	5,313
Total Both Races	30,175	38	41,722

Source: Employment and Earnings, January 1971 and January 1980.

Black women (and other races) experienced a 47 percent increase in employment this past decade compared with 37 percent for White women. In fact, minority women experienced a better rate of employment growth for every age category except for the 25-34 age group. While the growth in employment for both races of women is extraordinary, there are more than twice as many White women 25-34 employed now as there were in 1970 compared with 87 percent for Black and other races of women.

A noteworthy aspect of the national data for minority women is that, with the exception of the 25-34 age group, the growth in employment for the decade is more equally distributed across the age groups while the proportion of employed White women over 45 is only slightly higher than it was in 1970. This situation reinforces what was seen in the labor force data. Because their earnings are somewhat lower than White people, the standard of living of minorities is more adversely affected by inflation. Minority women are probably compelled, therefore, to continue working in their older years while generally more affluent White women demonstrate some hesitation to continue.

The following table charts the employment growth of men and women for the decade in Wisconsin.

Table 24

	1970*	1974	1975	1976	1977	1978	1979
Total	1,703.6	1,980	1,980	2,053	2,107	2,107	2,273
Male	1,069.2	1,234	1,210	1,236	1,254	1,281	1,318
Female	634.4	754	771	817	853	906	955

*1970 Census. Subsequent years' data from Current Population Survey 1971-73 are not available by sex.

Total employment grew about 33 percent for the decade or about a 3.3 percent average annual rate for the ten years. Male employment grew at a slow pace, about 23 percent for the decade and a 2.3 percent average annual rate. Female employment grew more than 50 percent in Wisconsin during the 70's for an average annual rate of five percent! Note, too, that the growth of female employment continued right through the recession. This is due, for the most part, to the continued growth in trade and service industry employment -- industries in which many women find employment.

While Wisconsin enjoyed a better rate of employment overall for the decade than the nation, women in Wisconsin did much better than the nation. The growth of female employment in Wisconsin was 12 percentage points higher than female employment growth nationally.

The table below charts the trend in employment growth in Wisconsin for women by their race and age. Data is from Berkeley Laboratory projections.

Table 25
Female Employment by Race and Age
for Wisconsin
1970 and 1981 Projected

(In Thousands)

White	1970	Percent Change	1981
16-19	63.7	87	119.2
20-24	96.6	66	160.6
25-34	101.5	118	221.1
35-44	111.0	58	175.6
45-64	213.4	16	247.6
65+	26.7	10	29.3
Non-White			
16-19	1.5	33	5.0
20-24	3.7	191	10.8
25-34	6.0	238	20.3
35-44	5.1	105	10.5
45-64	4.7	102	9.5
65+	0.4	75	0.7

Clearly, the largest employment growth for any age group belongs to the 25-34 year olds for all races of women.

Some caution must be taken because the numbers are not large for minority women, but the rate of employment growth for them is quite outstanding. The trend of older women working longer and taking jobs in later years, as witnessed by the more uniform distribution of employment growth across all age groups, is consistent with the national pattern noted earlier.

Women on the whole earn considerably less than men despite both a growing interest in work (labor force participation) and a growing share of total employment. If the trend of the past few years continues, women will be about 85 percent of male employment by 1990 and by the year 2000 for all practical purposes will have achieved an equal share of total employment.

Part-Time Employment

Women by far are the biggest share of the part-time labor force. In large part, this is due to their status as the primary householder. To accommodate raising children today, part-time jobs are frequently the most convenient solution. Despite all of the demographic data that suggest to the contrary, national estimates show no proportionate growth of part-time women workers. As the table below illustrates, the trend toward part-time employment is weak.

Table 26
Female Part-Time Employment
By Year, Age and Reasons
1970 and 1979 U.S.

(In Millions)

	Total Part-Time	Part-Time Involuntary	Part-Time Voluntary	% Part-Time Invol. Reasons as % of Total Part-Time and 25+
1970				
Total	8.7	1.2	7.5	13.8%
25+	6.1	0.9	5.2	14.7%
1979				
Total	10.4	1.8	9.6	17.3%
25+	7.7	1.3	6.4	16.8%
% Growth				
Total	19.5%	50.0%	28.0%	--
25+	26.2%	44.4%	23.1%	--

Source: Current Population Survey.

The average annual growth of part-time employment for the decade for the nation was 140,000, a growth rate of about 1.9 percent or about half the 3.8 percent average annual growth rate for all employed women.

Part-time employment was 17 percent of total employment in 1979 -- virtually what it was in 1970. In 1970, about 82 percent of all part-time workers were doing so voluntarily. The remaining 18 percent were doing so because they couldn't get a full-time job, i.e., for involuntary reasons.

Sixty-two percent of all part-time workers in 1970 were women. That proportion climbed to 70 percent in 1978, but declined slightly to 67 percent last year. In 1979 as in 1970, one-fourth of all part-time workers were 16-19 years old. Most, as one would expect, worked part-time voluntarily.

Women age 25 and over are of particular interest because their age correlates with the time for making family raising and career decisions. That age cohort constituted 71 percent of total part-time employment in 1970, 80 percent in 1978 and 75 percent in 1979. Seventy-one percent of all women 25 years and older working part-time are between the ages of 25 and 44.

The implication that women are taking part-time employment to facilitate raising a family is fairly strong. However, it apparently is not meeting their economic needs. The percentage gain from 1970 to 1979 for women working part-time involuntarily indicates a growing desire to work full-time. Since the growth of part-time employment lags the growth of total employment by about half, one can assume that women need the higher earnings of full-time jobs.

Balancing their traditional role as mothers and housekeepers while taking on additional economic responsibilities frequently conflicts with finding full-time employment. Often, the hours are difficult to schedule and/or the pay (as will be shown) is insufficient to make all the bother, much less the job, worthwhile.

Women are demonstrating a desire to work full-time. The trend toward smaller families, later children and higher levels of education are contributing to an increased sense of job awareness. While the economic need in our inflationary times is the primary reason for most women wanting to work full-time, the number of women with career aspirations seeking full-time work for the rewards and stimulation that it can provide is also on the rise.

Industry Employment

This and the following section on the occupational employment of women will examine the segments of our economy in which women find work, the kind of work that they do, and what income they realize from that work. The standard of living that any person experiences is created out of the income from their work.

The importance of industry data is to examine which industries in Wisconsin are growing most rapidly; to see which ones are employing proportionately more women; and to see what the pay structure is of those industries that are employing more women.

Employment in all of Wisconsin's industries has grown nearly 10 percent since 1977. The total number of women employed has grown about 14 percent from 740,000 to more than 843,000, increasing the female portion of total employment from 40.9 to 42.6 percent.

The table on the following page details industry employment for women for 1979 and the ratio of women in 1977 that appeared in the 1978 report.

There are some trends worth noting. The proportion of women in retail trade declined slightly. The proportion of employment that is women in the service and finance industries grew twice as fast as the average rate of growth for women in all industries. That ratio in durable goods manufacturing grew almost twice the average. The major industry segment in which women achieved the greatest percentage gain in jobs was transportation, where the proportion of women working was 4.4 percent higher than two years earlier.

Many of manufacturing industries in which women have a higher percentage of total employment such as electrical and electronic equipment, measuring, analyzing and controlling instruments, and fabricated metal products, involve large amounts of light benchwork assembly, inspection and quality control operations and/or light production machine processes. These types of jobs tend to pay reasonable wages, eight hour shifts tend to begin early in the day ending early in the afternoon, while the work itself is not physically demanding and the working environment is generally pretty good. Consequently, jobs in these industries have traditionally and, even more so today, been attracting women to them.

The next table shows the growth of three major industry segments as a percent of manufacturing. Trade and service have been the fastest growing in employment overall. Note that the growth of employment as a percent of manufacturing in these industries has slowed to nearly a standstill since 1977. This is a noteworthy occurrence since more than 50 percent of all employed women work in trade and service industries. There is a combination of concerns here.

First, the female portion of the labor force grew 12 percent from 1977 to 1979 with employment keeping pace. The female labor force is projected to grow still another 10 percent through 1981. However, the growth in the employment of women is expected to drop off the pace to about 5.5 percent over that time span. The current recession, in part, is a cause of this. The slower employment growth of the trade and service sectors, however, is also a likely factor in the slowing rate of female employment. Moreover, there is also some (albeit meager) evidence that women are not taking jobs in the retail trade sector as they once did.

Notice that the percent of women in retail trade in 1979 is the same as it was in 1977 (previous table). A (0.1) percent difference in these data is not meaningful. Much of retail trade employment is less than full-time and generally low paying. Considering that part-time employment growth is small for women, it could be earnings in the retail trade industry do not fulfill their economic requirements for working. (Narrative continued on page 31).

Table 27
Estimated Total and Women's Employment by Industry
Wisconsin - June 1979

Industry	Estimated Employment	1979 Percent Women	Estimated Number of Women	1977 Percent Women
Mining	2,984	8.7	258	6.3
Construction	94,033	6.2	5,859	5.5
Manufacturing	579,047	28.0	162,138	25.3
Durable Goods	388,107	26.1	101,126	23.0
Lumber and Wood Products, Exc. Furn.	22,591	26.6	6,016	25.8
Furniture and Fixtures	10,867	36.2	3,933	33.2
Stone, Clay, Glass & Concrete Prod.	10,419	27.9	2,907	30.7
Primary Metal Industries	30,293	11.0	3,344	9.2
Fabricated Metal Products Except Machinery and Transportation	57,401	27.8	15,957	23.6
Machinery, Except Electrical	128,700	19.7	25,380	16.9
Electrical and Electronic Machinery, Equipment and Supplies	58,677	43.7	25,654	37.7
Transportation Equipment	44,662	12.0	5,342	11.1
Measuring, Analyzing and Controlling Instruments; Photographic, Medical & Optical Goods; Watches & Clocks	12,353	49.2	6,075	43.5
Miscellaneous Mfg. Industries	12,144	53.7	6,518	53.6
Nondurable Goods	190,940	32.0	61,012	29.6
Food and Kindred Products	60,459	25.4	15,369	24.7
Textile Mill Products	5,634	61.0	3,436	61.9
Apparel & Other Finished Prod. Made From Fabrics and Similar Materials	6,632	84.3	5,592	81.5
Paper and Allied Products	48,877	18.8	9,179	16.2
Printing, Publishing & Allied Ind.	30,977	33.0	10,213	29.5
Chemicals and Allied Products	9,886	24.5	2,419	21.0
Rubber and Misc. Plastics Products	17,783	47.6	8,458	35.5
Leather and Leather Products	10,292	61.0	6,277	59.5
Other Nondurable Goods	400	17.3	69	—
Transportation	91,477	23.0	21,009	18.6
Trade	462,267	46.2	213,677	45.7
Wholesale	100,842	24.1	24,323	21.6
Retail	361,425	52.4	189,354	52.5
Finance, Insurance and Real Estate	90,652	61.7	55,962	58.3
Service and Miscellaneous	358,939	66.6	238,862	62.9
Government	300,775	48.4	145,626	49.8
Federal	27,704	45.8	12,677	37.0
State[1]	69,082	39.7	27,405	51.3
Local	203,989	51.7	105,544	51.0
Total Nonagricultural	1,980,174	42.6	843,391	40.9

Source: Data are from the Current Employment Statistics Program. Wisconsin Department of Industry, Labor and Human Relations.

[1]Due to the reporting procedure, the data for 1979 and 1977 are not comparable for State government.

Table 28
Selected Industry Employment as a Percent of Manufacturing[1]
Wisconsin

	Manufacturing Employment Annual Average (In Thousands)	Retail Trade (% of Mfg. Emp.)	Service (% of Mfg. Emp.)	Government (% of Mfg. Emp.)
1962	455.9	54.0	34.0	38.0
1963	459.3	54.7	34.9	39.6
1964	469.6	59.9	35.6	40.5
1965	491.9	55.5	36.0	40.9
1966	508.6	56.6	36.8	42.3
1967	508.7	58.6	38.7	45.3
1968	510.3	60.5	40.6	47.9
1969	520.9	61.7	42.2	49.0
1970	500.9	65.4[1]	46.1	53.0
1971	479.6	69.3	49.7	56.3
1972	495.4	70.0	50.7	55.7
1973	531.7	68.5	50.1	52.0
1974	546.1	68.5	51.4	50.7
1975	507.0	73.9	57.2	56.3
1976	519.7	74.8	57.9	55.5
1977	540.4	75.8	59.0	53.1
1978	569.7	74.9	59.2	52.3
1979	592.5	75.3	59.7	51.5

Source: Data from the Current Employment Statistics Program, Wisconsin Department of Industry, Labor and Human Relations. Note that, with the exception of two good years just prior to the recession of 1974, manufacturing employment has largely stagnated since the mid to late 1960's, showing no evidence of higher growth until 1978. As a result of that increase, competition for workers between generally higher-paying manufacturing and the lower-paying trade and services sectors increased as well.

[1] Note that some of the percentage increase in employment for these industries is due to large declines in manufacturing employment. In this case, for example, employment in Wholesale/Retail Trade rose 3.7 percent as a percent of manufacturing, 1.9 percent of which was mathematically due to the decline in manufacturing employment. It is also interesting that employment in the lower-paying industries is much less likely to decline in periods of recession. Note the employment in years around 1970 and 1974.

This will become more and more true for any low-paying industry. People will be exceedingly difficult to attract as the 1980's go by. Many more people will be seeking work not only in 1981 but throughout this decade. Women job seekers, for the foreseeable future, will continue growing as a proportion of all job seekers. Their traditional fields of work are growing at a declining rate while at the same time women have good reason to be somewhat less interested in those traditional areas. Should these indicated trends continue and become recognizable as an honest-to-goodness movement into less traditional fields of work (i.e., as it shows up in the data), it will very likely create a more competitive job market for everyone.

The primary reason indicated for a shift away from low-paying industries is probably economic. Keeping pace with inflation so that only a minimum economic sacrifice is necessary is the biggest single explanation for more people seeking better paying full-time work today than five years ago. However, most female employment is still concentrated in the lower-paying industries.

The table on the following page ranks manufacturing industries according to the ratio of women employed and by average weekly earnings. Compare this table to the preceding table that charts the employment growth of women by industry. Do so using both the number of women (how many) and the rate (the percent growth, 1979 minus 1977) and you will quickly see that the proportion of women in industries paying higher wages tends to increase faster than those paying less. One can reasonably expect that by 1985 this trend will be even more apparent.

Table 29
Rank of Wisconsin Manufacturing Industries by Ratio of Women Employed and by Rank of Average Weekly Earnings

Rank by Ratio of Women	Ratio of Women (June '79)	Industry	Rank by Average Weekly Earnings	Average Weekly Earnings ('78 Annual) Average	Rank by Average Weekly Earnings 1977
1	84.3	Apparel and Other Finished Products	17	$145.51	17
2	61.0	Textile Mill Products	15	180.50	16
2	61.0	Leather and Leather Products	16	175.66	15
4	49.2	Instruments and Related Prod.	12	218.60	12
6	43.7	Electrical, Machinery, Equip. and Supplies	10	252.41	10
5	47.6	Rubber & Misc. Plastics Prod.	11	220.55	11
7	36.2	Furniture and Fixtures	13	212.19	13
9	27.9	Stone, Clay and Glass Prod.	9	274.92	7
8	33.0	Printing, Publishing & Allied Products	6	285.48	4
11	26.6	Lumber & Wood Products (Except Furniture)	14	185.47	14
12	25.4	Food and Kindred Products	7	281.06	5
10	27.8	Fabricated Metal Products	8	275.04	9
13	24.5	Chemicals and Allied Products	4	297.64	6
14	19.7	Machinery, Except Electrical	2	311.28	2
15	18.8	Paper and Allied Products	3	307.08	3
16	12.0	Transportation Equipment	1	335.91	1
17	11.0	Primary Metal Industries	5	285.75	8

Source: Data from the Current Employment Statistics Program, Wisconsin Department of Industry, Labor and Human Relations.

Women in Occupations

The analysis of industry employment trends in the previous section suggests that industry employment trends for women are beginning to take a new direction. The reasons for that, again, are a combination of such things as higher pay requirements to meet economic needs, growth of the business cycle through 1979, and a slowing or maturing of employment growth in the trade industry which has been traditional domain for women job seekers. The combined result of these influences (that the data tends to show) is that more women are seeking work in other industry sectors.

However, the greatest proportion of employment gains for women are still in the more traditional industries, so one can expect that the greatest occupational employment increase will still be the same as in the past. However, since the industry employment trend has shifted somewhat, it is worth the effort to examine the occupational data to see if new trends are noticeable there.

Data that details the kind of work women are employed in is not readily available. It would be nice to know how many tool and die makers are women, but current data systems cannot provide answers at that level of detail. However, within reasonable limits, it is possible to assess the employment of women within broader occupational groups. Then by narrowing down the choices, some sense can be made of female employment that is not easily associated with a more specific occupational group.

At the aggregate level of detail we have estimates of the percentage of female employment by occupation. The table below gives that for 1975 and 1979.

Table 30
Women as a Percentage of All
Employed Persons by Occupations for Wisconsin

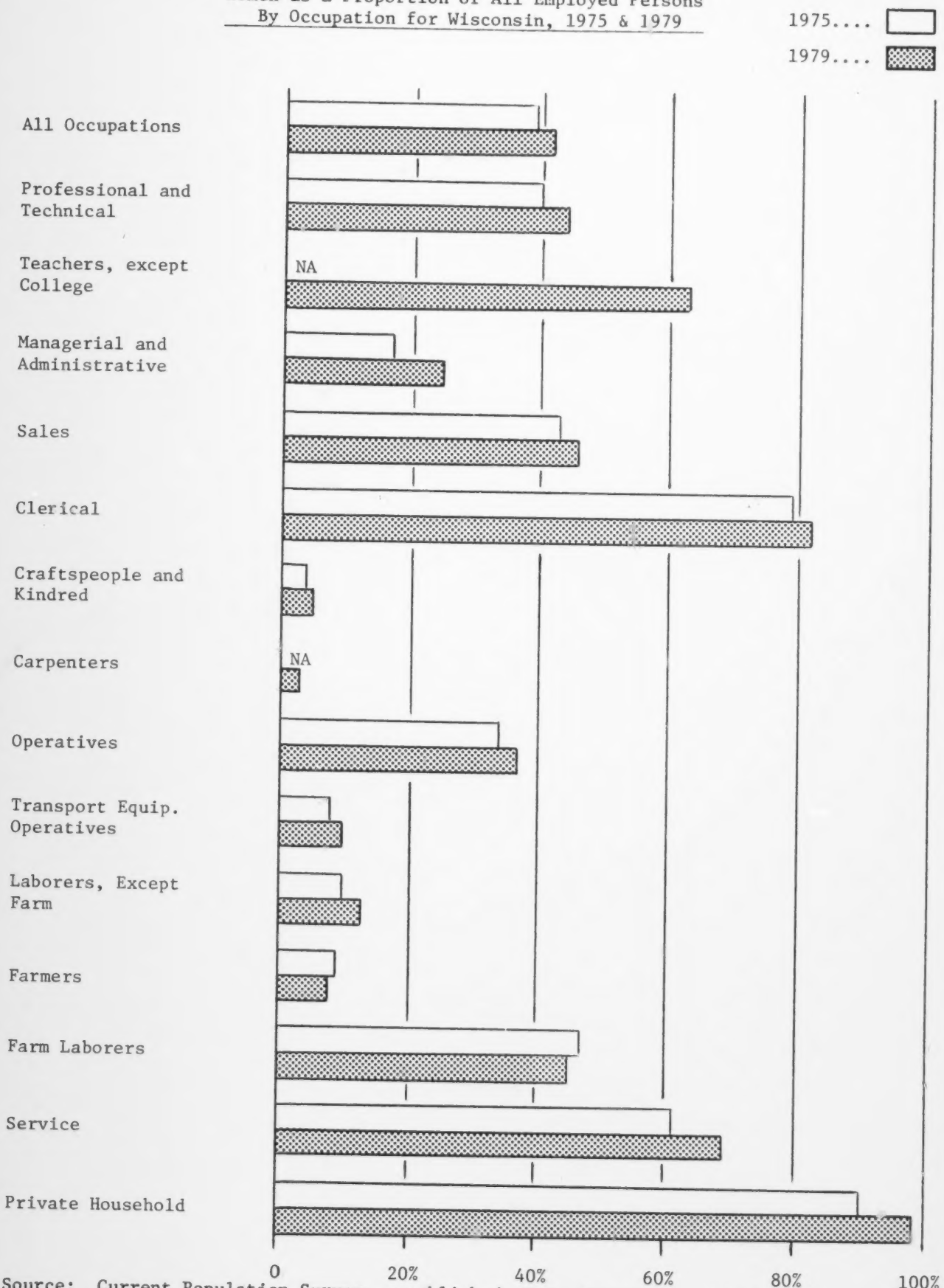
1975 and 1979

	1975	1979
All Occupations	39	42
Professional-Technical	40	44
Managerial-Administrative	17	25
Sales	43	46
Clerical	79	82*
Craftspeople and Kindred	4	5
Operatives	34	37
Transportation Equipment Op.	8	10
Laborers, Non-Farm	10	13
Farmers and Farm Managers	9	8
Farm Laborers	47	45
Service Workers	61	69

*This proportion is used in calculations for Table 32.

Source: Current Population Survey, unpublished, U.S. Department of Labor, Bureau of Labor Statistics.

Women as a Proportion of All Employed Persons
By Occupation for Wisconsin, 1975 & 1979



Source: Current Population Survey, unpublished, U.S. Department of Labor, Bureau of Labor Statistics.

Some explanation about what these classifications include is useful for more specific analysis of them. According to this table, 44 percent of all professional-technical employment is women. Historically, however, the biggest overall share of this classification consists of teachers and health workers. Almost 70 percent (68.0) of all professional-technical women work as either teachers or health workers (i.e., nurses, technicians, doctors). Over 30 percent of total professional-technical employment are women employed in these two traditionally female occupational areas.

In the managerial-administrative occupational area be cautious of the percent growth. These cautions are only so for an analysis of the data with respect to the number of employed women in areas of management where they are traditionally under-represented. National evidence suggests that an increasing proportion of all entrepreneurial endeavors are being attempted by women. Open a flower shop, a used clothing boutique, a book store, i.e., manage your own business, and you're counted here. Almost 30 percent of all women managers were self-employed in 1970 -- about 18 percent in retail trade. By recent accounts, that ratio is growing. Growth in retail trade through the decade was exceptional. Historically, the highest proportion of women managers (40 percent) are employed in retail trade management, both salaried and self-employed.

Clerical and Sales are basically as they would seem to be except that there is a great deal of diversity among the occupations. The highest proportion of women in clerical are secretaries, followed by bookkeepers, typists and cashier-checkers. These four occupational groups comprise 52 percent of all female clerical employment. The predominance of women in sales, almost 90 percent, are sales clerks and counter clerks, and 88 percent of those are in retail trade.

Crafts Workers include construction and manufacturing crafts and apprentices. Operatives include machine tenders and operators of all types -- photo processing, packaging, production assembly machines, spray painting machine operators. Also, skilled and semi-skilled assembly, quality control people, meat cutters, surveying crews, and sewing machine operators from garments to upholstery are part of this area.

Transportation Equipment Operatives are self-explanatory as are Laborers (unskilled blue collar), farm and non-farm.

There are three big occupational components of the Service occupations as far as women are concerned. They are the non-professional-technical health occupations such as dental assistants and nurse aides/attendants, food service workers, and cosmetologists.

This table charts the percent distribution of men and women employed by occupation.

Table 31
Number and Percent Distribution
of Total Persons Employed by Sex,
By Occupation for Wisconsin, 1979

(In Thousands)

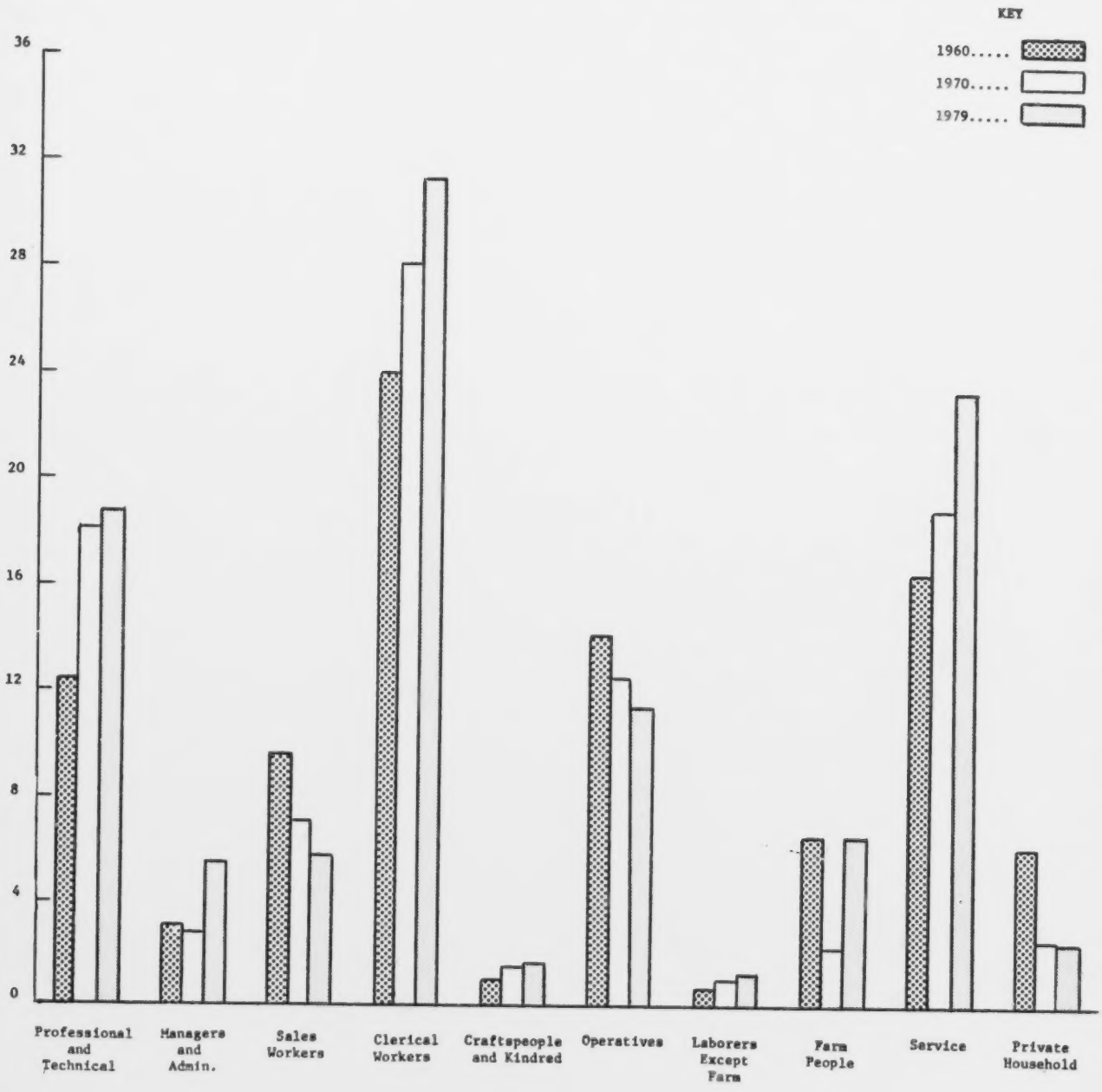
	Total Employed Persons		Total Male		Total Female	
	#	%	#	%	#	%
Total	2,273	100.0	1,318	100.0	955	100.0
Prof-Tech	323	14.2	182	13.8	141	14.8
Teachers	76	3.3	28	2.1	48	5.0
Managers, Officials	208	9.2	155	11.8	53	5.6
Sales	122	5.4	66	5.0	56	5.8
Clerical	363	16.0	64	4.8	299	31.3
Crafts Workers	332	14.6	315	23.9	17	1.8
Carpenters	31	1.3	29	2.2	1	0.1
Operatives	296	13.0	187	14.2	109	11.4
Trans. Workers	79	3.5	71	5.4	8	0.9
Laborers	100	4.4	87	6.6	13	1.4
Service Workers	324	14.2	101	7.7	223	23.3
Farm Workers	66	2.9	35	2.7	3	3.2

Source: Current Population Survey (CPS) Annual Average Employment by Occupation.

The four largest occupational groups for women are clerical, service, professional-technical and operatives in that order with the latter two groups being less than half of the first two. With the total size of the occupational group in mind, note that men enjoy more uniform access to all occupations except for the two areas where women predominate -- clerical and service.

The following bar graph illustrates this comparison historically for 1960, 1970 and 1979. Notice that the proportion of all women in some occupational areas has been declining steadily since 1960. This is somewhat deceiving, however. Operatives, for example, is one category showing a decline. In reality, the actual number of women operatives today is higher, but has not grown at a fast enough pace compared with other categories. Hence, it appears to show a loss. This supports the conclusion of the analysis beginning on the next page that employment of women as a proportion of non-clerical employment in manufacturing outside of their traditional industries and occupational areas is basically unchanged.

Employed Women By Occupation as a Percent of Total Employed Women 1960, 1970 and 1979
Wisconsin



Source: 1960 and 1970 Census of Population, Wisconsin

1979 - Current Population Survey, unpublished, U.S. Bureau of Labor Statistics

Previously, some examples were given with regard to the types of jobs that are included in the broad occupational areas. Not much is known about the distribution of women among these occupations in the generally higher-paying manufacturing industries. In the following portion of this report the proportions of women in the broad occupational groups are used to analyze how the employment of women in selected manufacturing industries is likely to be distributed among the occupations found in manufacturing.

The next table estimates employment of women by manufacturing industry according to how much of that employment is women in clerical jobs and the proportion of women in non-clerical employment. Later discussion addresses the issue of how to divide the non-clerical portion into different job groups. The proportion of clerical employment for each industry is derived from the Occupational Employment Survey program (OES). The number of women in clerical positions in each of these industries was assumed to be 82 percent -- the percentage of all clerical that women comprise taken from Table 30. Hence reducing total employment for each industry by the estimate of clerical employment from OES and dividing that result into the estimate of the total women employed that are non-clerical (total women employed less 82 percent of clerical employment) yields an estimated ratio of women in the industry that are employed in non-clerical occupations.

How to interpret the tables.

Thirty-three percent of all women working in Wisconsin are clerical, while 34 percent of all non-clerical employment is women. In the construction industry, 80 percent of all women employed are in clerical occupations compared with 32 percent for all of manufacturing. Just over one percent of all non-clerical employment in construction is women.

Those industries on Table 33 which employ the highest percentage of women in non-clerical occupations in the state illustrate how little female employment there is to distribute among the various non-clerical occupations for the average size firm in each industry.

The table presents an average picture. If all female employment was distributed exactly this way, this is what the distribution of employed women would look like for these industries and occupational groups according to current population survey estimates of employment of women by occupation. As one moves away from the average distribution toward what really exists, then the number of women in occupational areas where they are traditionally under-represented can be thought of not unlike a scarce resource -- if more are allocated to one area then another area will not have as many, some will do without.

The allocation of employment in this table requires some explanation, however. Note that in some cases total employed women are under-distributed (+). In two industries which employ the lowest ratio of non-clerical women, using averages has caused over-distribution (-). The reason is that the average distribution of women within occupations for 1979 doesn't allocate female employment by occupation within industry very well. The 1970 Census of Population, Detailed Characteristics, Table 170, has some profiles which estimate the distribution of employed women within manufacturing by the major occupational groups. The

Table 32
Women as a Percent of Clerical
and Non-Clerical Employment

Wisconsin 1979

Industry	Employed Total[2]	Employed Women	Women in Clerical Occupations as a Percent of Employed Women	Women as a % of Non-Clerical Total Employment
Total	1,980,174	843,391	33	34
Mining	2,984	258	64	3
Construction	94,033	5,859	80	1
Manufacturing	579,047	162,138	32	21
Lumber Products	22,591	6,016	20	23
Furniture	10,867	3,933	19	32
Stone, Glass, Concrete	10,419	2,907	23	24
Primary Metals	30,293	3,344	54	6
Fabricated Metals	57,401	15,957	27	23
Non-Electrical Machinery	128,700	25,380	60	8
Electrical Machinery-Equipment	58,677	25,654	20	40
Transportation Equipment	44,662	5,342	47	7
Measuring, Analyzing Instruments	12,353	6,075	20	45
Food and Kindred	60,459	15,369	31	19
Textile Mill Products	5,634	3,436	16	58
Apparel	6,632	5,592	10	85
Paper and Allied Prod.	48,877	9,179	44	12
Printing and Publishing	30,977	10,213	38	23
Chemicals & Allied Prod.	9,886	2,419	54	13
Rubber & Plastic Prod.	17,783	8,458	18	44
Leather Products	10,292	6,277	14	59
Transportation	91,477	21,009	72	8
Wholesale Trade	100,842	24,323	87	4
Retail Trade	361,425	189,354	22	48
Finance, Insurance and Real Estate	90,652	55,962	73	37
Service	358,939	238,862	20	64
Government[1]	300,775	145,626	29	41

[1] Includes Federal, State and Local including hospitals and public schools.
[2] Total employed does not include agricultural employment.

Source: Current Employment Survey (CES) and Occupational Employment Survey (OES).

Table 33
Estimate of Occupational Distribution
of Women in Average Size Firms
by Seven Largest and Two Lowest
Employing Industries of Non-Clerical Women

	(a) Average Size Firm	(b) Average Number Women Per Firm	(c) Number Clerical	Number Professional-Technical	Number Managers	Number Crafts	Number Operatives	Number Laborers
Percent Distribution of Women by Occupation (d)	---	---	31	37(1)	17	5	37	13
Highest Representation:								
Furniture	57	20	6	1	1	1	5	1 (+)
Electrical Machinery	193	83	26	4	2	1	42	1 (+)
Measuring Instruments	88	43	13	1	1	1	18	1 (+)
Textile	134	82	25	3	1	1	33	1 (+)
Apparel	42	35	11	1	1	1	12	1 (+)
Rubber and Plastics	60	29	9	1	1	1	15	1 (+)
Leather	97	59	18	1	1	1	27	1 (+)
Lowest Representation:								
Primary Metals	134	15	5	2	1	1	30	1 (-)
Non-Electrical Machinery	82	16	5	3	1	1	15	1 (-)

(1) Non-Teaching Professional-Technical

Sources: (a) Wisconsin Unemployment Compensation Reporting Program
(b) BLS-790 Current Employment Survey, 1979
(c) Occupational Employment Survey
(d) BLS Current Population Survey, 1979

operative group is estimated to have the highest ratio of women in it. For reference, the average distribution of women in the operative category is 37 percent. The 1970 Census estimates these ratios for operatives in manufacturing:

	Percent Women
Furniture	34.0
Electrical Machinery	52.8
Measuring Instruments	44.8
Apparel	75.5
Rubber and Plastics	46.9
Leather Products	45.6
Primary Metals	9.4
Non-Electrical Machinery	17.8

The first six industries on this list have the highest proportion of non-clerical women employed in Wisconsin. All but furniture are under-represented by the average 37 percent of women that are operatives. While the last two, primary metals and non-electrical machinery, which employ a low percentage of non-clerical women, are greatly over-represented by the average.

These data can be further refined, but the picture does not change. Even though there has been greater employment of women in manufacturing and the employed labor force in general, there are so few women employed outside of their more traditional occupational areas it can be concluded that not very many more women have found work in the more traditionally male occupational areas of management, professional-technical and the crafts (highly-skilled blue collar areas).

The aggregate data further support this conclusion. The table below charts employment growth by occupation for the decade and the portion of that growth made up of women. The two largest employment growth occupations are clerical and service. Women constitute an estimated 98 and 83 percent of that growth respectively.

Table 34
Total Employment Growth by
Occupation and Female Employment
Growth as a Percent of Total Growth
1970 to 1979

	1970[1]	Growth	1979[2]	Women as a Percent of Employment Growth
Professional	238,000	85,000	323,000	56.5
Managers	128,000	80,000	208,000	43.7
Sales	111,000	11,000	122,000	90.0
Clerical[3]	255,000	108,000	363,000	98.0
Crafts	239,000	93,000	332,000	6.5
Operatives	256,000	40,000	296,000	70.0
Service	200,000	124,000	324,000	83.1
Trans. Equip. Oper.	68,000	11,000	79,000	45.4
Laborers	79,000	21,000	100,000	23.8

[1]Source: 1970 Census, Table 170.
[2]Source: Current Population Survey, unpublished, 1979.
[3]Includes Sales Clerks.

The professional-technical and managerial job categories are also large categories. Women comprised 56.5 percent of the estimated employment growth in the professional-technical category over the decade, or about 48,000 professionals. However, about 70 percent of those women, or 33,000, are estimated to be in the teaching and health professions, leaving 15,000 to be distributed throughout the rest of Wisconsin's industries over a 10-year period. In manufacturing alone there are over 8,000 employers. Even if the estimated 15,000 professional-technical women in Wisconsin (that are not employed in the health or teaching fields) were 50 percent low, it would still leave very few professional women joining the professional-technical ranks in manufacturing. This, of course, discounts employment in other industries so it serves to illustrate the situation quite well.

In the managerial category, about 34,900 of the occupational employment growth is estimated to be women. Based upon 1970 Census profiles, 40 percent of that, or about 14,000, are women (assuming that profile today is about the same) managers, salaried and self-employed in retail trade. That leaves 20,900 to be allocated across manufacturing, service, construction and all of the other industries and employers within them.

Even if these estimates are 50 percent low, the number of professional-technical and managerial women employed in other than their traditional occupational areas within these broader categories is still small compared with over 60,000 non-retail trade employers.

The data lead to the conclusion that meaningful employment trends for women into historically less traditional occupational areas have not developed.

Women and Occupational Earnings

In the opening portions of this report, a good deal of time was spent detailing the demographic characteristics of women in the population. A major consideration of that discussion is low earnings and the impact low earnings have on women and their dependents' standard of living. Readers of this report should be mindful of those conditions when they read this section. The connection is obvious. A job and the number of hours spent performing it is the primary source of personal earnings.

The table on the following page presents a comparison between wages paid to men and women according to the broad occupational groups.

Table 35
(000's)

	Total Male	50% Earn Below:	Total Female	50% Earn Below:
White Collar Workers	477	$12,000-14,999	566	$4,000-5,999
Professional-Tech.	176	12,000-14,999	147	6,000-7,999
Managers	157	12,000-14,999	46	6,000-7,999
Sales	86	8,000- 9,999	65	2,000-3,999
Clerical	58	10,000-11,999	308	4,000-5,999
Blue Collar Workers	656	8,000- 9,999	160	4,000-5,999
Crafts	292	10,000-11,999	---	---
Operatives	256	8,000- 9,999	128	4,000-5,999
Laborers	107	2,000- 3,999	---	---
Service Workers	123	2,000- 3,999	274	1,000-1,999

Source: 1976 Survey of Income and Education (1975 data).

Largely because of their occupational field, about half of all women in Wisconsin earned less than $8,000 in 1975. Just over 40 percent of all employed women earned less than $6,000.

Fifty percent of all men employed in professional-technical jobs earned at least $15,000, while the same ratio of women earned at least $8,000. The other comparisons from this table are equally out of proportion.

One could argue that wage comparisons at such a broad occupational level are not meaningful. However, the content of these broad occupational areas has been previewed and discussed. Most women are employed in the lowest-paying industries. Most female employment by occupation also falls into the lower-paying industries (i.e., 40 percent of women managers are in retail trade). Also notable is that as the proportion of non-clerical female employment declines by both industry and occupation, industry/occupational wages go up.

The following data is taken from recent Department of Industry, Labor and Human Relations wage surveys. These occupations were chosen because employment in them is clearly dominated by either men or women.

Table 36

Majority Employment Male	Mean Wage/Hour
Accountant	$ 7.77
Architectural Drafter	6.71
Civil Engineer	9.69
Electrical Engineer	9.73
Mechanical Engineer	10.25
Systems Analyst	9.10
Auto Mechanic	5.90
Dental Lab Technicians	5.52
Machinist	6.64
Tool and Die Maker	8.38
Millwright	7.87
Printing Press Operator	7.36
Sheet Metal Worker	6.48
Machine Set-Up Operator	6.39
Maintenance Mechanic	6.72

Majority Employment Male (Cont.)	Mean Wage/Hour
Production Machine-Tool Operator	$ 7.49
Maintenance Painter	6.79
Welder	6.59
Diesel Mechanic	7.03
Industrial Fork Lift Operator	6.79

Majority Employment Female	Mean Wage/Hour
Dental Hygienist	$ 8.20
Registered Nurse	6.32
Physical Therapist	7.46
Occupational Therapist	6.24
Bookkeeper	4.51
Dental Assistant	3.91
Legal Secretary	4.42
Licensed Practical Nurse	4.71
Medical Secretary	4.05
Operating Room Technicians	4.68
Medical Technologist	6.48
Cashier-Checker	4.28
General Clerk	4.19
Keypunch Operator	4.10
Nurse Aide	3.46
Receptionist	3.80
Sales Clerk	3.47
Secretary	4.68
Sewing Machine Operator	3.99
Typist	4.10
Bank Teller	4.00

Source: Survey of Wage Rates in Selected Occupations, Wisconsin SMSA's, 1978.

For the most part, this comparison is informational. The survey is generally not controlled with this kind of analysis in mind. Consequently, while it would be useful, such comparisons as occupational training male vs. female are not possible. What can be stated quite obviously is the kind of work men do is valued considerably more than the work that women do.

The table on the following page compares male and female earnings for similar types of work. The data in the table is from the 1970 Census. While it is now 10 years old, indications from more recent data are that these relationships still exist pretty much as they did then.

Table 37
Median Earnings in 1969
Selected Occupations in Selected Industries in Wisconsin
1970 Census

	Male	Female
All Industries	$ 7,868	$3,272
Manufacturing		
Managers and Administrators	8,299	4,310
Professional and Technical	13,234	6,561
Sales	10,428	5,347
Clerical	9,371	2,674
Craftsmen	7,750	4,582
Operatives	9,032	4,613
Service	7,654	4,095
Labor, Nonfarm	6,476	3,109
	6,220	3,814
Construction		
Managers and Administrators	8,452	4,273
Professional and Technical	12,039	7,826
Sales	10,884	5,637
Clerical	10,464	---
Craftsmen	9,523	3,992
Operatives	8,691	6,760
Service	8,691	4,185
Labor, Nonfarm	6,643	1,571
	6,759	4,400
Transportation, Communication and Public Utilities	8,655	4,341
Managers and Administrators	11,770	6,295
Professional and Technical	9,856	5,713
Sales	10,845	5,000
Clerical	8,110	4,524
Craftsmen	9,041	5,897
Operatives	7,775	3,795
Service	6,707	2,373
Labor, Nonfarm	6,522	3,000
Retail Trade	6,070	2,057
Managers and Administrators	9,062	4,480
Professional and Technical	10,370	3,808
Sales	6,606	1,804
Clerical	3,879	2,669
Craftsmen	7,210	3,368
Operatives	3,605	2,788
Service	2,054	1,660
Labor, Nonfarm	1,710	1,820
Finance, Insurance and Real Estate	9,683	3,984
Managers and Administrators	12,253	6,005
Professional and Technical	9,984	5,077
Sales	10,684	4,389
Clerical	7,277	3,943
Craftsmen	8,044	4,847
Operatives	6,113	3,382
Service	4,105	2,030
Labor, Nonfarm	2,559	---

	Male	Female
Personal Services	$ 5,722	$1,694
Professional and Managerial	8,898	3,604
Clerical and Sales	4,113	2,341
Craftsmen and Operatives	5,717	2,501
Service, Not Household	5,115	2,291
Private Household	1,607	1,156
Labor, Nonfarm	1,690	1,847
Professional Services	8,102	3,556
Managers and Administrators	12,407	6,016
Professional and Technical	9,499	5,566
Sales	7,000	1,695
Clerical	3,248	3,267
Craftsmen	7,994	3,462
Operatives	5,831	2,850
Service	4,725	2,463
Labor, Nonfarm	4,269	2,415
Public Administration	8,603	4,565
Managers and Administrators	9,932	5,113
Professional and Technical	10,284	6,587
Sales	---	---
Clerical	8,331	4,724
Craftsmen	7,995	---
Operatives	7,889	---
Service	8,512	1,903
Labor, Nonfarm	6,499	3,043

Source: Census of Population, 1970, Detailed Characteristics, Wisconsin, Table 177.

There are undoubtedly more women working in a more diverse number of occupational areas than there were ten years ago. It is equally certain that steps have been taken toward equality in wages. Anyone can cite individual cases of successful women in many occupational areas. Given the business expansion of the latter half of the 1970's and the corresponding growth in female labor force participation and employment, such observations are not surprising. However, the percentage, the proportion of employment by occupation that is women, essentially is the same today as it was in 1970.

The gap between male and female earnings, national studies have shown, is widening. Factors which positively impact higher earnings such as unionization, high productivity industries, small labor supply compared with occupational demand all tend to be more true of male than of female occupational areas.

Women and the Labor Force in the 1980's

Historically, women have had a greater attachment to the labor force than most people realize. In 1900, when woman's place was "in the home," 20 percent of all women of working age still participated in the labor force! That attitude today has eroded substantially, with more than half the women of working age employed or looking for work.

While there are countless individual reasons for seeking work, economic necessity is a major force in the decision process. Frequently, women are entering the labor force to help support their family or themselves. The rapid increase in the number of working wives is largely an immediate response to accelerating inflation. Economic reasons, combined with a desire for a career, are causing women to postpone marriage and, when married, to delay childbearing.

Due largely to demographic factors, the economy is projected to demonstrate continued growth through the 1980's. In all likelihood, this will mean continued inflation, as total demand continues to outstrip our resources. At their present rate of growth, women workers will continue to increase as a proportion of the total labor force. Near equality with men in terms of a proportionate share of total employment seems a virtual certainty in the next 15 years at the present rate of growth.

The Debate

Discrimination against women still exists. It is built into our attitudes about their physical capabilities and about their historical role in the labor force. Aside from the reluctance to employ women in many industries and occupational areas, the work itself is often a barrier. Low pay and hours that don't match well with family responsibilities create many problems. Physical demands of work structured for men are sometimes prohibitive to successful performance by women. There are others.

While many employers feel pressure to or do make good faith efforts to facilitate access for women into jobs where they are historically under-represented, it is probably accurate to say that most have not <u>needed</u> women with the skills that they require as a source of labor.

There is an element of "tokenism" that is difficult to characterize and equally difficult to dispel. For most traditionally non-female job openings there is an adequate supply of men with proven abilities in the occupational areas where men are <u>traditionally</u> expected to be successful performers. It is difficult to understand, then, what incentives exist for employers to consider women who are, in general, less qualified in terms of relevant experience and training in these areas. Thus, when an affirmative action hire is made, it is often viewed as a token gesture.

Given that women have made few inroads into male-oriented employment in the last ten years, it may be that employment policies that emphasize a "balanced" work force can define minimum upper limits on equality of access to jobs. Affirmative action policy is often the "incentive" that initiates efforts to

balance[1] the work force in terms of women (as well as minorities). That policy and the attitudes it fosters, ironically, could well be counter-productive to advancing the concept of equality in the labor market for women (and minorities).

Upon close examination, it is evident that no induced incentives, i.e., tax breaks, federal contract policies, government programs, can ever hope to achieve equitable treatment of men and women. These policies are in place to facilitate and hasten the evolutionary process of breaking barriers and changing attitudes. As the data indicates, the process is still painfully slow.

Without launching into a debate on social responsibility, one of the aims of this report is to create an awareness and a better understanding of social issues.

To pull into perspective some of the more important points in this report:

- A significant number of women have a strong attachment to the labor force.

- Women's attitudes that paid work and a career are important are gaining momentum, as witnessed by the higher labor force participation of women in their childbearing years, ages 25-34.

- Many women are in the labor force because of economic need. Consequently, fewer women are seeking part-time employment.

- Women are continuing to enter traditional industries and occupational fields, though industry employment trends suggest a subtle shift toward higher paying areas.

- Earnings in traditionally female industries and occupational areas lag behind inflation. Consequently, the earnings gap between men and women continues to widen.

- Education has a greater impact on higher earnings for women than for men. Among other possible conclusions, this suggests that women overall are not usually considered for jobs requiring an extended (and expensive) on-the-job training investment.

- Occupational choice is limited and lower wages are more pronounced among poorly educated as opposed to better educated women.

There is a clear relationship between persons' earnings and their standard of living. Actually, that relationship exists between persons' jobs and their standard of living. Consequently, these facts are not surprising:

- Families headed by women live on substantially less earnings than those headed by men.

- Other female-headed households, such as young and older women living alone, are in the same situation as families headed by women.

[1] Concept of employing women and minorities by occupation in proportion to the estimated number of them with skills relevant to that occupation within a defined labor market area.

- There are a surprisingly large number of women and dependents living on low incomes -- several times more than men.

- A significant share of that population and a large number of children are living close to or in poverty as it is defined for data gathering.

When the facts as indicated by the data are related in this way, the labor force equality of women becomes a genuine social issue. That is one reason that goes beyond "work force balancing incentives" for society to take a direct interest in improving the current employment situation of women.

The other reason also offers a means through which the social issue can be improved. Demographers, labor market analysts and economists alike are projecting labor shortages beginning in the late 1980's and increasing into the 1990's. In general, these shortages will be caused by rapid growth in consumer demand fueled by the post-World War II baby boom cohort's consumption of goods and services to form new households and families. Estimates of the number of people being born today reveal how many people of working age there will be 16 years hence, i.e., the labor supply. An analysis of the future supply-demand situation for labor indicates, with a good deal of certainty, that a labor shortage can be expected.

With the decline in the growth rate of semi-skilled and unskilled blue-collar jobs and the continuing advance of technology, the labor shortfall is clearly going to occur in the more highly skilled, blue and white collar predominantly male occupational areas as we know them today.

As this scenario unfolds, it is clear that eventually women will be in demand in an occupational area of the labor market where they currently do not enjoy that status except in a very limited way.

What Stands in the Way?

By 1990, at the current rate of change, there will be no increase in the proportion of women with training and experience in the skilled blue and white collar occupational areas.

Some of the more well-known barriers women face today have been mentioned. Another one, though, is the way many women are raised to visualize their role. Despite the well-publicized women's movement and its related new attitudes, research shows that the concept of homemaker and motherhood still predominates. Further, surveys of young women not only reveal that fact but also indicate that their occupational choice is still quite traditional, i.e., nurses, teachers, secretaries.

How these choices are influenced by a woman's traditional role models experiences in the labor force is not clear. What is clear, sociologists point out, is that there are very few non-traditional role models for young women to emulate. Hence they don't receive the appropriate feedback and motivation to explore and develop different occupational interests. Because society doesn't systematically encourage a broader perspective, the outcome is that relatively few women enter into training and work experience programs that lead to non-traditional occupations.

Today, the result is that the recruitment of women to meet even the limited goal of balancing the work force is floundering on shortages of relevant training and skills. All of the aforementioned labor market conditions -- from embedded attitudes that cause discriminatory hiring practices to insufficient role models -- interact to cause a self-perpetuating chain of events which effectively narrows women workers' occupational choices.

The changing supply-demand conditions in the 1980's will provide a way to improve the labor market status for everyone. Perhaps we can take advantage of it.

APPENDIX A

Poverty income levels are used to measure who is economically disadvantaged. Minimum income levels for different sized families are employed since it costs more to support more people. The table below presents these levels for 1975, 1979, and 1980 for non-farm families.

Family Size	POVERTY INCOME LEVEL		
	1980	1979	1975*
1	$3790	$3400	$2575
2	5010	4500	3409
3	6230	5600	4242
4	7450	6700	5050
5	8670	7800	5910
6	9890	8900	6740

Illustration: If you were a member of a family maintained by a woman in 1975, you would have a 30 percent chance of living below the poverty income level for your sized family. If you lived in the average family headed by a woman (about 3.3 persons), you may have been fed, clothed and housed on something less than $5000 a year - about $95/week!

APPENDIX B

A household includes all persons who occupy a room, a group of rooms, that constitutes a housing unit with either a direct access from outside the building or through a common hall, or with complete kitchen facilities for the exclusive use of its occupants. Five or more unrelated individuals having common living arrangements do not constitute a household.

A family consists of a household head and one or more other persons living in the same household who are related to the head by blood, marriage, or adoption. Two points should be underscored here: (1) Each and every household need not contain a family, and (2) A household can sometimes comprise a family plus one or more other persons who are not related to the head.

Head of Household in the 1970 Census is the person who is regarded as the head by members of the household. However, if a married woman living with her husband was considered the head, her husband was still considered the head to simplify tabulation.

Part-time Work is defined as between 1 and 34 hours per week. Full-time work is 35 hours or more. Involuntary part-time employment means that persons worked less than full-time but not by choice. Causes include slack work, material shortages or inability to find a full-time job. Voluntary part-time means that persons worked less than full-time because it is largely their choice. Reasons include school work, homemaking and no desire to work full-time.

APPENDIX C

This appendix contains additional graphic comparisons of table data. They should serve to clarify many of the relationships being discussed in the narrative portions of this report.

The following is an index to the graphics with a brief explanation of the comparison.

C-1 Age vs. Earnings Men and Women 25-34 years
While earnings in this age bracket are not strongly influenced by time on the job as in the 35-44 age bracket, many more people of this age have education and training beyond high school. Educational influences seem to be evident for men and not for women.

C-2 Education vs. Earnings Men and Women College Graduates
There are many more women in the low earnings categories than men with the same level of education. Compare this graph with the wages for the occupations college graduate men and women normally make. The large number of women in the lower earnings categories results from a combination of limited occupation choice and motherhood.

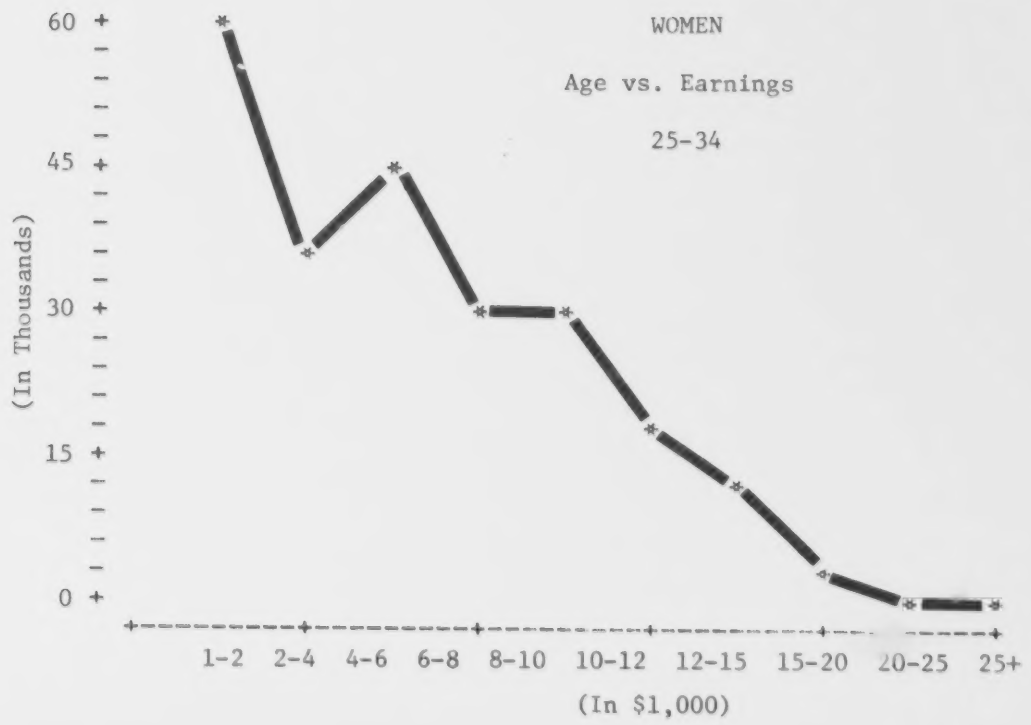
C-3 Education vs. Earnings Men and Women 8th Grade
Lack of education is clearly less of a barrier to higher earnings for men than for women. Note that, at this level of education, there are many more women employed than men.

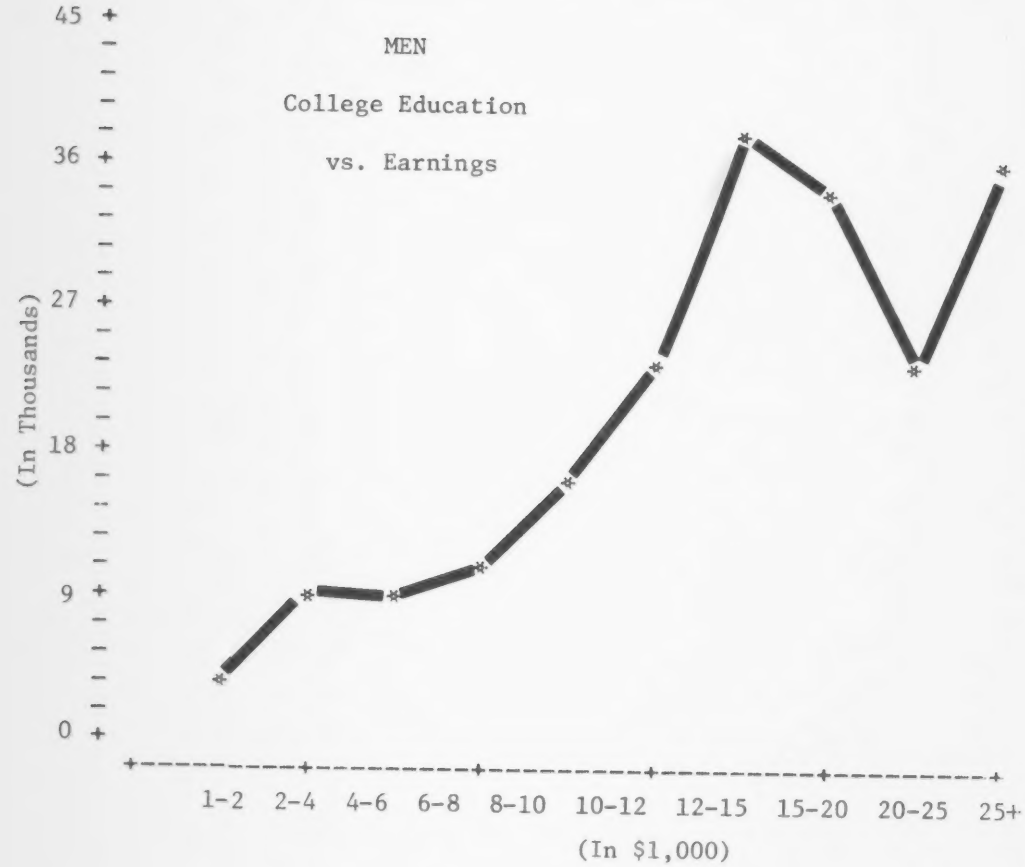
C-4 Education and Earnings Compared High School and College Graduates
These graphs show education and earnings relationships for men and women with the same level of education on the same graph. On the same scale (Y-axis), earnings differences are pronounced.

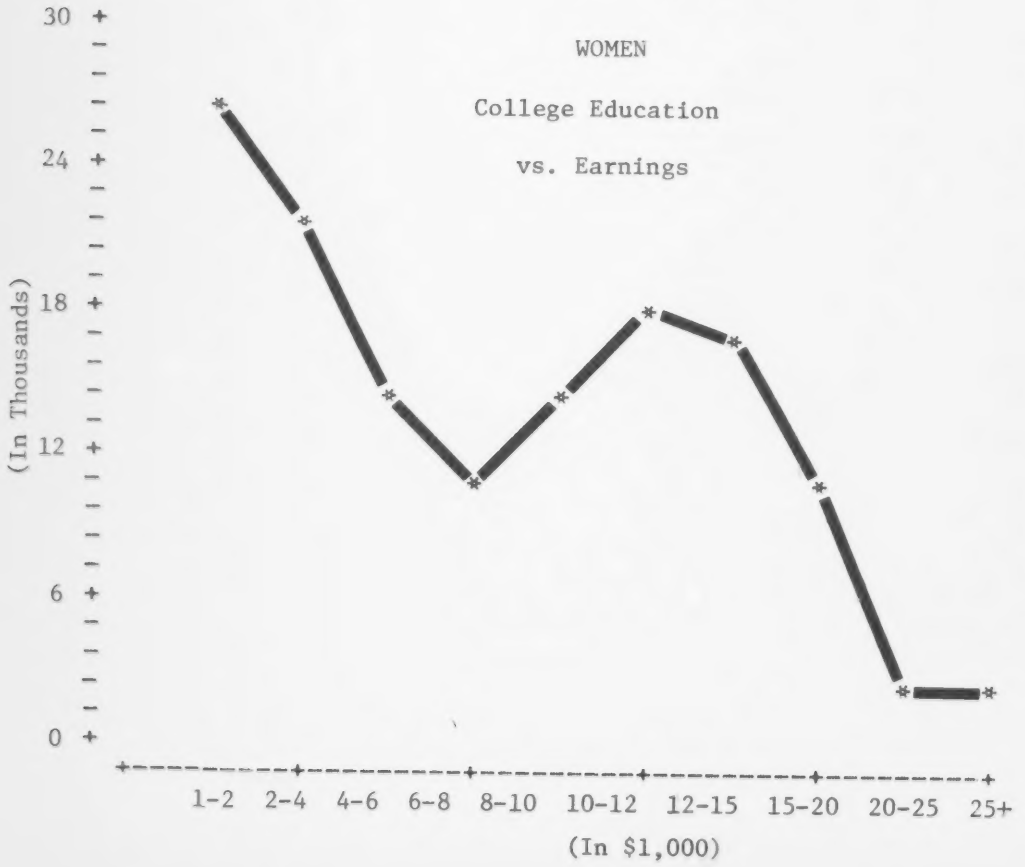
C-5 Levels of Education and Earnings Grade Levels Compared
These graphs clearly show how much more meaningful education is to higher earnings for men than for women. This is probably due, in large part, to greater occupational choice for men.

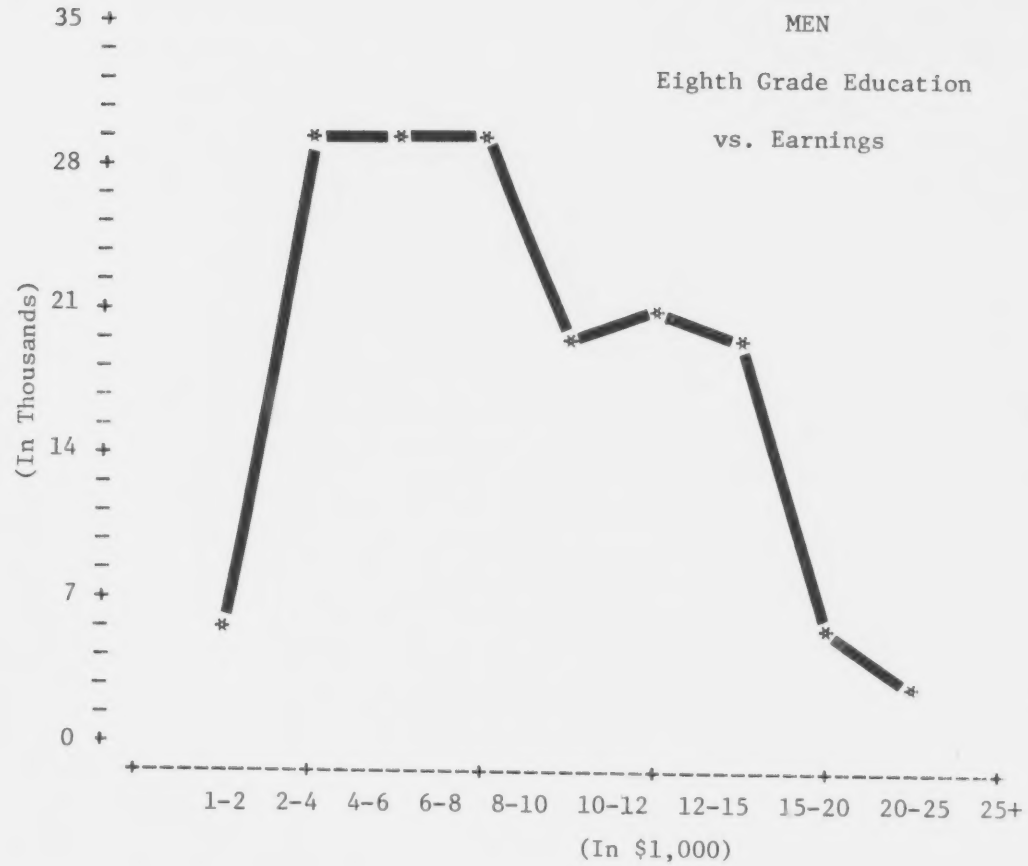
C-6 Labor Force Growth and Employment Growth Compared
These two graphs illustrate the rapid growth of female labor force participation and employment since 1950. However, most of the employment gain has been in the trade and service sectors which have also grown quickly. Notice how the two lines on both graphs are beginning to merge.

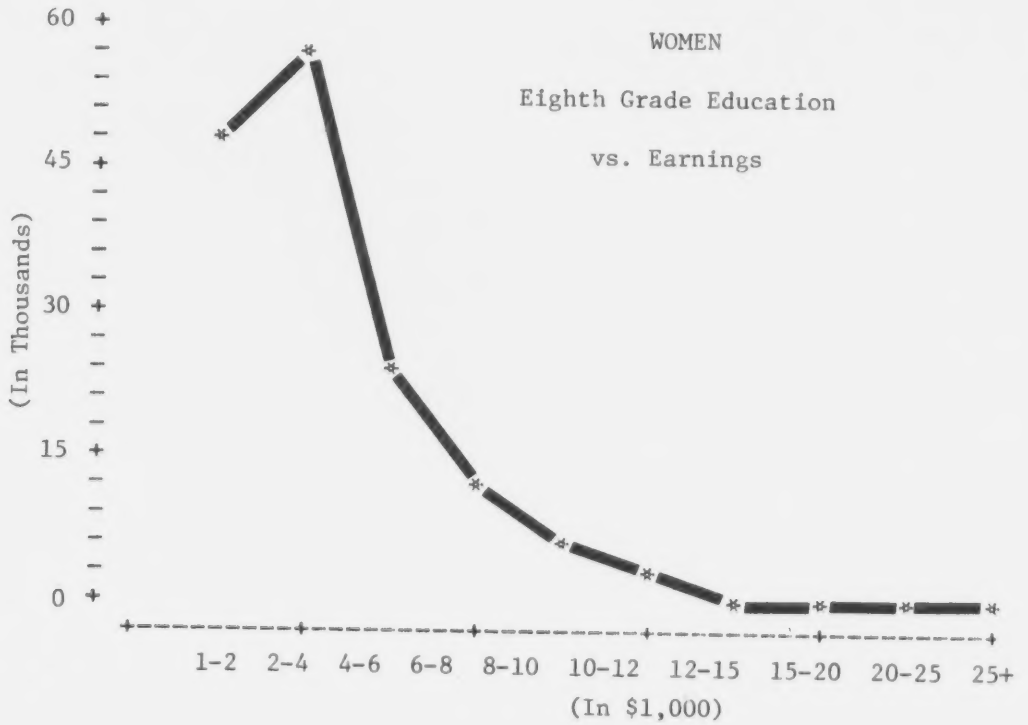
MEN
Age vs. Earnings
25-34
(In Thousands)
80
65
50
35
20
5
1-2
2-4
4-6
6-8
8-10
10-12
12-15
15-20
20-25
25+
(In $1,000)

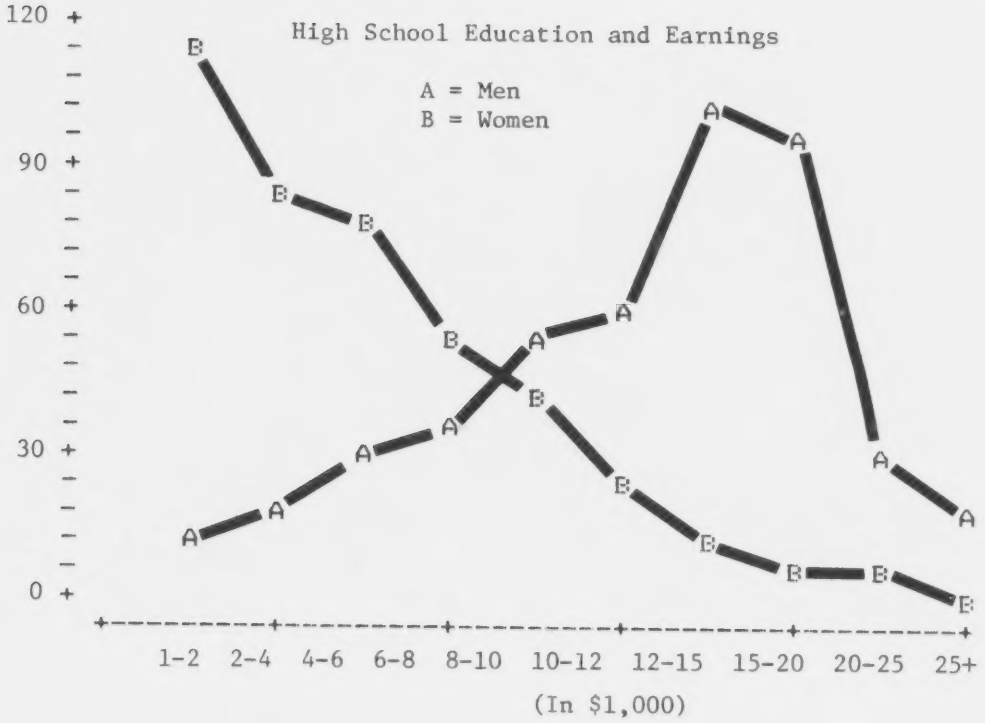

WOMEN
Age vs. Earnings
25-34
(In Thousands)
60
45
30
15
0
1-2
2-4
4-6
6-8
8-10
10-12
12-15
15-20
20-25
25+
(In $1,000)

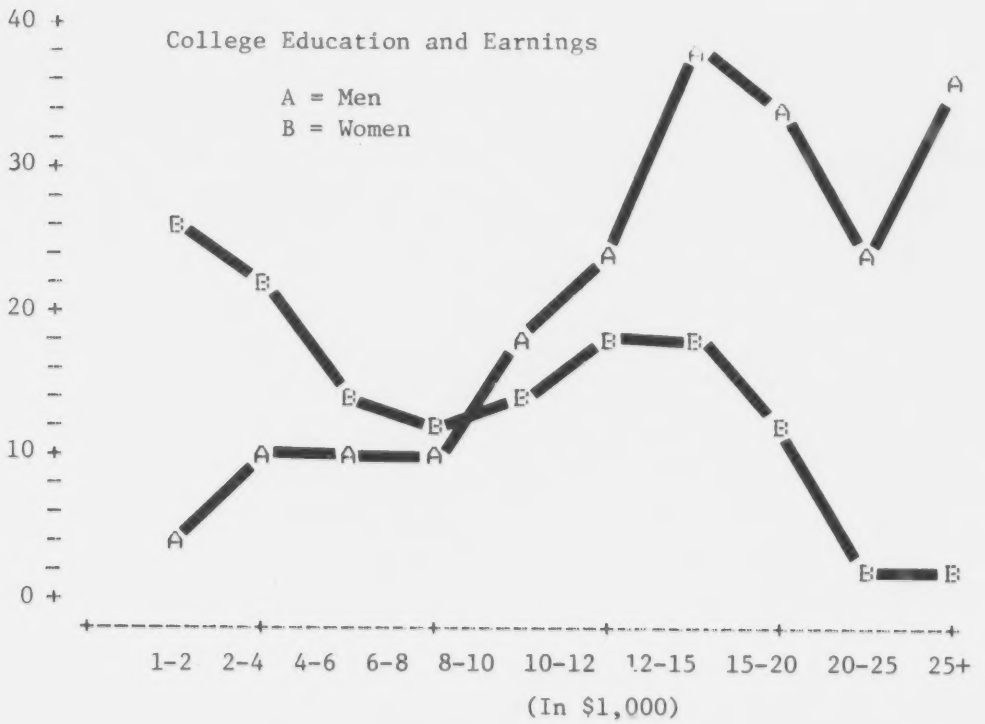

MEN
College Education
vs. Earnings
(In Thousands)
45
36
27
18
9
0
1-2
2-4
4-6
6-8
8-10
10-12
12-15
15-20
20-25
25+
(In $1,000)

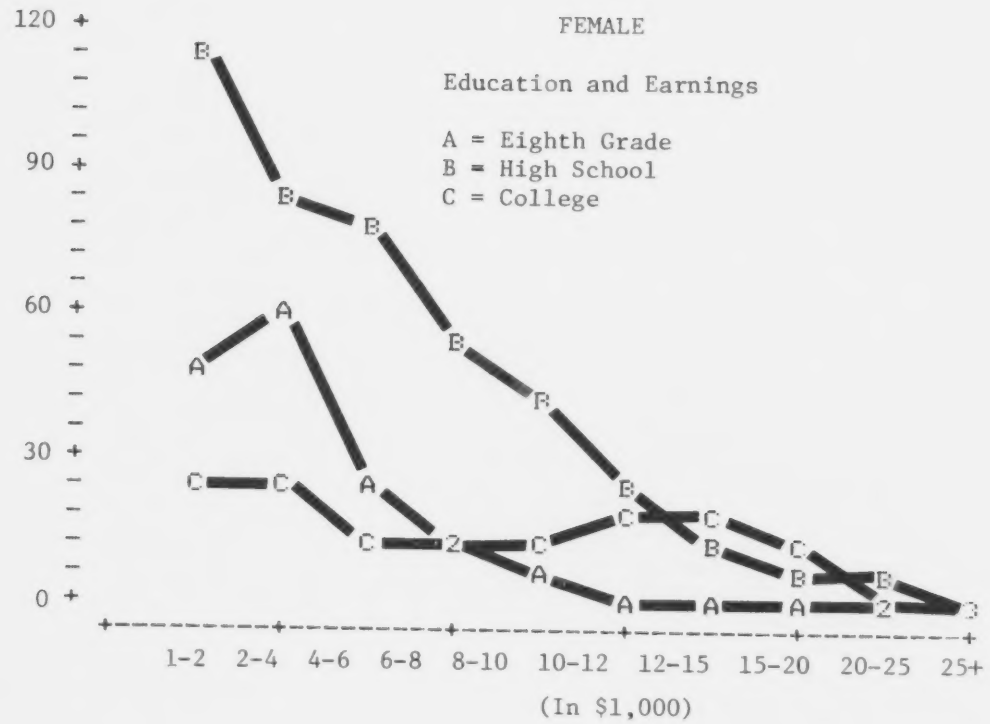

WOMEN
College Education
vs. Earnings
(In Thousands)
30
24
18
12
6
0
1-2
2-4
4-6
6-8
8-10
10-12
12-15
15-20
20-25
25+
(In $1,000)

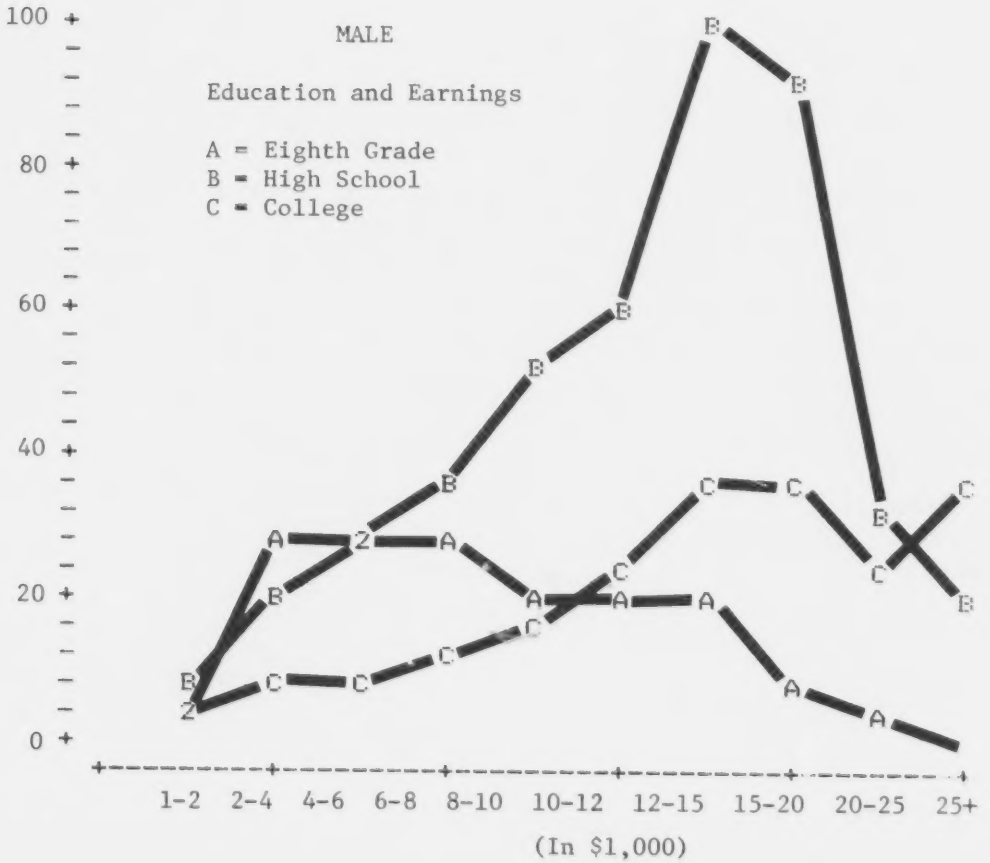

MEN
Eighth Grade Education
vs. Earnings
(In Thousands)
35
28
21
14
7
0
1-2
2-4
4-6
6-8
8-10
10-12
12-15
15-20
20-25
25+
(In $1,000)

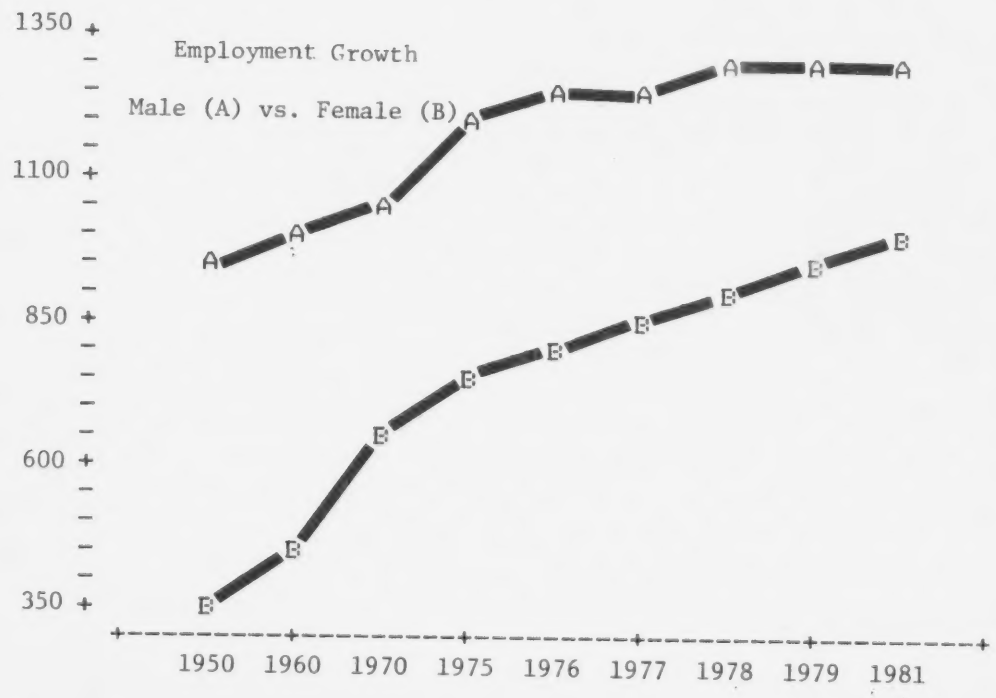

WOMEN
Eighth Grade Education
vs. Earnings
(In Thousands)
60
45
30
15
0
1-2
2-4
4-6
6-8
8-10
10-12
12-15
15-20
20-25
25+
(In $1,000)


High School Education and Earnings
A = Men
B = Women
120
90
60
30
0
1-2
2-4
4-6
6-8
8-10
10-12
12-15
15-20
20-25
25+
(In $1,000)


College Education and Earnings
A = Men
B = Women
40
30
20
10
0
1-2
2-4
4-6
6-8
8-10
10-12
12-15
15-20
20-25
25+
(In $1,000)


FEMALE
Education and Earnings
A = Eighth Grade
B = High School
C = College
120
90
60
30
0
1-2
2-4
4-6
6-8
8-10
10-12
12-15
15-20
20-25
25+
(In $1,000)


MALE
Education and Earnings
A = Eighth Grade
B = High School
C = College
100
80
60
40
20
0
1-2
2-4
4-6
6-8
8-10
10-12
12-15
15-20
20-25
25+
(In $1,000)



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